







# WOMAN'S

# HAND-BOOK OF HEALTH:

A

GUIDE FOR THE

WIFE, MOTHER AND NURSE.

ву WM. H. COOK, M. D.,

PROFESSOR OF BOTANY, THERAPEUTICS. AND MATERIA MEDICA
IN THE PHYSIO-MEDICAL INSTITUTE.

FIRST EDITION.

CINCINNATI:
WM. H. COOK, PUBLISHER,
101 WEST SIXTH STREET.
1366.



Entered according to Act of Congress in the year 1866,
BY WM. H. COOK,

In the Clerk's office of the District Court of the United States, for the Southern District of Ohio.

## PREFACE.

MEDICAL MEN have always observed that the larger portion of their services was required by woman; but probably there has been no period when this fact was so noticeable as it is at Though surrounded with conveniences, and provided with comforts, and nurtured with a tenderness never before enjoyed by her sex, the constitutional vigor of woman has never before appeared so feeble. Her maladies seem to be increased, and their perniciousness intensified; and a truly healthy lady is now so uncommon, especially in cities, but even in most sections of our rural districts, that every one possessed of a sound constitution becomes an object of peculiar observation in community. So current are these facts, that many persons suppose disease to be an inevitable necessity with woman; while reflecting people have for many years felt apprehensive of the effects that this general weakness among wives and mothers, must eventually produce upon the physical stamina of nations.

The causes for so much disease on the part of woman, can not be found in the peculiarities of her organization or its functions; for no fallacy is greater than that which supposes weakness and suffering to be her heritage. In providing for the perpetuation of the human race, an all-wise and beneficent Creator endowed the mother of the family with every power and faculty necessary to the discharge of all her peculiar duties. He gave her an organism unsurpassed in the harmony of its arrangements, and in adaptability to the purposes of receiving, developing and nurturing her offspring. He so developed the structures and molded the very bones in her frame, as to provide for the fulfillment of every duty assigned to her. Her very sensitiveness and delicacy, so commonly looked upon as her weakness and her reproach, are in truth her prerogative and her crowning glory; for in these lies her faculty of foreseeing and providing against those dangers which might otherwise destroy herself and offspring, in these lies her capacity

for concentrating all the vital resources of her frame for the birth of the embryo she has developed, and from these springs that great maternal love which never wearies as it toils for, watches over and educates her babe—a love so undying and so glorious, that the love of the Son of God for man is the only one that surpasses it. So perfect, indeed, are the mechanism of her frame and the endowments of her organs, that the very infidel acknowledges a Supreme Being, as he examines the wonderful development of woman.

It would almost be a criminal accusation against God, to suppose that, after fashioning the frame of woman so perfectly and designing it for purposes so noble as the perpetuation of the human race, he should leave that frame deficient in the one grand requisite upon which the successful performance of all her duties depends—the capacity to enjoy GOOD HEALTH.

The question now arises: Why is woman such a sufferer? To this the accumulated observation and experience of the medical profession gives the answer: Because of her infractions of the laws of health. These laws were established by the same hand which molded her frame; and were implanted at the very moment of her own conception. By their action was she developed, and under their influence was she brought to womanhood; and if they were allowed uninterrupted sway, they would carry her safely and healthfully to a ripc old age. But these laws are soldom allowed to operate without interference—being often interrupted by circumstances and accidents beyond control, but much oftener violated by exposures and habits that are wholly voluntary. As in all other laws of God's creation, the infraction of these brings suffering; and it is because her modes of eating, dressing, laboring, sleeping, and others connected with life, arc so contrary to the designs of nature, that the sensitive and finely-molded frame of woman is so much afflicted.

Many persons in good health are little inclined to observe these laws of Physiology; but are more disposed to look upon them as restraints—to be disregarded altogether, or infringed upon to the utmost limits of hardihood. By far the greater number, however, violate those laws unknowingly; and either do not understand them, or else are ignorant that so many seriPREFACE. V

ous consequences will follow an infraction of them. Physicians in all ages have deplored this lack of information among the people; and it has ever been considered that one of the most worthy benefits a medical man could confer upon his fellow-beings, was to instruct the public in the laws of life—in the means of preserving health and securing a sound constitution.

The principal object of the little volume here offered to woman, is to instruct her in all the laws that concern the welfare of her own being. A knowledge of these laws embraces an acquaintance with her own peculiar organization, its functions and its sympathics. It also includes an acquaintance with those functions under the varied conditions and influences to which her sex is liable; of the many circumstances which may cause her disease; and of the habits and restraints which are necessary to restore her to health. Such topics, therefore, form a considerable portion of this book; for whether a woman undertake to guide her own habits of living, or whether she submit herself wholly to the guidance of her professional adviser, she can not follow the rules of health intelligently, without first understanding the laws which regulate her own existence.

As the health of the child is inherited much more from the mother than the father, and as its nursing and training are exclusively under her control, no mother should fail to obtain sound information upon all such topics as relate to the welfare of her offspring—whose life is as dear to her as her own. Particularly should she understand the manner in which her own health may determine the constitution of her child, and by what means she may secure a healthy family. Such subjects are appropriately discussed in the present volume.

I am not of those who believe that every man and woman can become physicians, and easily acquire that amount of knowledge which will enable them to dispense with the services of professional men. Medical science is a subject too extensive to be fairly comprehended by less than a life-time of devotion to its study: yet every person can gather an outline of its general principles; and an universal diffusion of some of its leading facts, would be a benefit to the people at large and to the medical profession. Such knowledge would enable

VI PREFACE.

mankind to ward off a large portion of the maladies to which they are liable, by teaching them how to take some light medicines before disease became deeply seated. It would qualify them to decide when a malady was becoming severe; when all home treatment must be discontinued, and a competent physician called without delay-a course which would save many a precious life. By the aid of such knowledge, the people would also be fitted to act with jndgment and effect, in cases of great emergency, till a physician arrived; and when a physician was in attendance, it would enable them to understand his purposes so as to become of great aid to him by their intelligent nursing. The universal possession of such knowledge would also beget a closer bond of sympathy between the public and the physician; for by understanding his toils and anxieties better, they would see how much the true physician sacrifices for them, and learn to appreciate his services as those of their most unselfish friend.

On these considerations, a due portion of this work has been given to an account of the symptoms, causes, and treatment, of the maladics peculiar to woman. She has, in such subjects, the deepest personal interests; and a pretty full acquaintance with them is not only of service to her, but would seem to be a right which no mortal should attempt to debar her from cnjoying. It is not pretended that this volume gives all the means and modes that are known to the profession for the treatment of such maladies; but the treatment is even more extensive than any woman will attempt to practice, except when compelled by an emergency. The measures directed are sufficient for all the ordinary, and many of the suddenly severe cases; but in every instance, it is expressly to be understood that no woman is justified in depending upon her own skill in serious and complex stages of disease, if a proper physician can be obtained.

With these explanations of the purposes of this volume, and of the motives which led to its preparation, it is presented to my countrywomen in the hope that it may aid them in making their constitutions equal to the acknowledged superiority of their beauty and intelligence.

WM. H. COOK.

# CONTENTS.

CHAPTER I.

NEED OF A SCHOOL FOR THE BODY.

CHAPTER II.

INFLUENCE AND PECULIARITIES OF WOMAN.	
CHAPTER III.	
•	
STRUCTURE OF THE FEMALE ORGANS.	
CHAPTER IV.	
FEMALE DEVELOPMENT.	
Period of Puberty,	- 34
Signs and Development of Puberty,	37
Menstruation,	- 40
Premature Development,	51
Rules for Establishing Healthy Womanhood	- 54
CHAPTER V.	
CHAITER V.	
DISEASES OF THE ORGANS AND FUNCTIONS.	
Diseases of the External Genitals,	83
Tardy Menstruation,	92
Profuse Menstruation,	96
Painful Menstruation,	- 108
Suppressed Menstruation,	107
Fluor Albus,	- 115
Chlorosis,	125
Cessation of the Menses,	- 132
Hysteria,	141
Neuralgia and Rheumatism of the Womb,	- 151
Inflammation of the Womb,	154
Ulceration of the Womb,	- 159
Falling of the Womb,	161 - 180
Inversion of the Womb,	- 180 184
Forward and Backward Displacements,	- 188
Prolapsus of the Vagina,	- 100 190
Displacement of the Bladder,	- 19t
Displacement of the Rectum,	195
Hernia of the Uterus and Ovaries,	- 19
Uterine Dropsy,	19
Polypus of the Womb,	- 20
Fibrous Tumor of the Womb,	20
Cauliflower Excrescence,	- 20
Cancer of the Womb,	- 200

#### CONTENTS.

Inflammation of the Ov Dropsy of the Ovaries.	aries,	-			-	-	-		-	211 214
	CHA	PTEI	R VI	•						
	M.A	RRIA	GE.							
	CHAI			r						
	ERIOD O	F PR	EGNAI	NU X.						9.90
The Reproductive Function Conception,	10n,	-		-	_	_	-	_	_	229 234
Development of the Fœ	tus.			_	-		_	_		237
Physical Changes in the		r.	-			-			-	245
Signs of Pregnancy,	-	_	-	-	-		-	-		249
Abnormal Conceptions,	-	-	-	-		-		-	-	254
False Conceptions,	- 40	-	-	-	-		-	-		256
Hygienic Rules for Gest	ation.	-	-	-	•	-		-	-	258
	CHAP	TER	VII	I.						
DIS	EASES (	OF PR	EGNA	NCY.						
Disorders of the Nervou	s Syste	m,	-	-	-		_	-		265
Disorders of the Liver a						-	-		-	268
Disorders of the Circula	tion an	d Res	spirat	ion,			-	-		275
Abortion		7	-	-		-		•	-	285
	CHAI	PTER	IX.							
	CHII	D-BII	RTH.							
Preparations for Confine	ment,		_	_	_		_	_		292
Labor,	- <u>-</u>	-	-	-		-			_	300
Positions of the child,	-	-	-	-	-		-	-		311
Rendering Assistance,	-	-	-	-		-		•	-	316
Attentions to the Child,		-	-	-	-		-	-		335
Difficult Labor, - Flooding-Hemorrhage.	-	-	-	-		-	-	•	-	$\frac{340}{352}$
1100ding—Itemorriage.		-	-	-	_		•	-		004
	CHA	PTE	R X.							
MANAC	SEMENT	AFTE	R DEI	LIVE	RY.					
Hygienic Regulations,	-	-	-	-		-	-		-	356
Sore Nipples, -	-	-	-	- '	-		-	-		363
Caked Breasts,	-	**	-	-		-	-		-	365
Child-bed Fever, - Milk Leg	-	-	-	-	-		-	-		368
milk neg		_		-		-	•	'	-	373
	CHAF	TER	XI.							
MAN	AGEMEN	T OF	CHIL	DREN						
Hygiene of Childhood,	-	-	-	-	-		-	-		375
Disorders of Infancy,		-	-	-		-				381
Prevention of Scrofula a	nd Con	sump	tion.		-		-	-		387
	CHAP	TER.	XII							

MEDICINAL PREPARATIONS.

## WOMAN'S

# HANDBOOK OF HEALTH.

#### CHAPTER I.

#### NEED OF A SCHOOL FOR THE BODY.

It is a fact well established, that both the physical and mental strength of the human race depends very largely upon woman. If a mother is strong and healthy, her children will enjoy many prospects of being robust and vigorous beyond the children of a delicate and sickly mother. If a mother have in her constitution the seeds of any serious malady, her offspring will be liable to develope that malady in its graver forms, even though she herself may escape its full consequences. Of course the constitutional weakness or vigor of the father, will make its impression more or less decidedly upon the children; but this impression is not so decisive and controlling as that made by the mother. A slender and even delicate father, may rear strong sons and daughters by a mother whose frame is highly endowed with vitality; but a robust father rarely has healthy and hearty progeny by a debilitated and sickly mother. So well has this general fact been established, by observation extending over the civilized world for many centuries, that it is now a conceded proposition in social ethics, that the strength and prowess of a nation depend chiefly upon the health and vigor of its mothers!

And it is also well known that the strength and clearness of the mother's mind, will rarely fail to reproduce itself upon the minds of her children; and few indeed are the master intellects of the world, who can not trace their mental vigor to the sound intellect and wise private education of a mother. That mother may not have enjoyed a fashionable education; may not have been skilled in music, embroidery, and conventional polish; but she possessed that clear judgment, firm character, noble devotion to her children, and pure religious principle, that always distinguish true greatness, which alone can make a woman capable of imparting to a son or daughter those qualities of character that will move a world. On the other hand, a merely sentimental and fashionable woman, one whose culture consists but of the accomplishments, the frivolities, and the light literature of the day, can not be expected to raise up around her a family of any thing beyond ordinary "smartness," or of such dawdling refinement as begins and ends life in mediocre common-placeness.

And additional to the above two general facts, is this third one: That a feeble body gives its own tone to the mind; and a frame prostrated by illness, can not support a clear and vigorous intellect.

With such facts before us, it is lamentable to look upon the majority of the women of the present day; to note how commonly they present slender frames, strong tendencies to disease, and a mind capable of but a surface education; and then to attempt from the premises to draw a conclusion as to the probable fate of the children born of such women. The facts justify the fear that disastrous consequences must ensue, where such women attempt the grave duties of maternity; and this fear grows into a startling reality, in the form of those extended statistics (carefully gathered over the surface of the two most civilized hemispheres), which show that, of all children born in Europe and America, one third die before they reach their fifth year! Such mothers can not furnish a healthy and vitally endowed germ for conception; they can not supply to the child in their womb the vigor which is necessary to give it firm development before it is born; and they can not furnish rich enough nutriment from their breasts during the months of suckling. Such infants can not possibly be endowed with the strength necessary to resist any severe disease, but are ready to succumb at the first attack; and the mother is too seldom possessed of that information which can enable her to rear the tender plant with that judicious care necessary to its safe development. Thus between the too feeble vitality derived from a mother who really had no vitality to spare, and then from the injudicious nursing of that untutored though loving mother, the little blossoms find an early grave, and unnumbered homes are made desolate.

Of course all mothers are not discased, nor possessed of but tottering constitutions, nor endowed only with light minds. There are thousands who are possessed of the highest attributes which belong to a mother; yet it is a glaring fact that far, far too many of them are sickly and delicate. The present fashions in society and upon education, stimulate the nerves, exhaust the brain by a surfeit of superficial studies, and weaken the body by most improper habits of eating, clothing, etc. This course weakens the frame by a too high cultivation; it developes the nerves at the expense of bone and muscle-stimulates the sensibilities at the expense of the constitution. There can be no objection to the accomplishments, nor to female education; for a woman's mind and heart should both be educated to the highest degree. But nature abhors deformities; and a system of education which cultivates but half the woman, becomes a means of deforming her. The body requires its school and its system of education; and to exhaust all the arts of culture on the mind, and leave the body to establish itself as best it can in the face of every neglect and against constant exhaustion, can result in little less than crippling that constitution upon which the value of all the rest depends.

Very fortunately, a change for the better is taking place in some localities; but it is only a partial change, and advances very slowly. Nor can the revolution be complete, nor woman receive that harmonious development of body, mind and heart, upon which the beauty of her perfection depends, until mothers fully understand the peculiarities of their own organism, and the influences necessary to its healthy growth and preservation. How can a plant be well cultivated, without a full understanding of its nature and habits? How can a child be properly trained, without a thorough knowledge of its impulses, affections and capacities? We know that success in rearing flowers depends upon a knowledge of the soil, moisture, light, heat and other circumstances, best suited to their growth and the ripening of their seed; and no gardener or farmer can hope to be successful with his crops, except as he observes and supplies the peculiar needs of each plant. We know that success in education depends upon an understanding of the mental peculiarities of the child; and no teacher can hope to prosper with a class by drilling them as machines, but only by calling out the ambition of onc, repressing the forwardness of another, encouraging the timidity of a third, and thus meeting the distinguishing qualities of each as they severally need. In like manner, a woman can not hope for a sound constitution and good health, except as she knows what influences will affect her adversely, and what will impress her frame favorably. Nor can she hope to secure a sound development to her daughters, unless she is acquainted with the peculiarities of their organization, and knows how to guard them against every cause of disease, and to lead them through those paths which will yield to them strong muscles, pure blood, calm nerves, and an equable play of every tissue in their finely-moulded frames.

The preservation and prolongation of life depend very much upon ourselves. We frequently observe the feeble and delicate child become healthy and vigorous, with proper care; while the robust and healthy infant, under unfavorable circumstances, becomes enfeebled. The same facts apply to the mind, and also to the morals; and it is well to know, that no kind of seed will grow in stony places, but that true seed in good soil will yield a noble harvest for the labor. No mother, therefore, need despair of improving her offspring in bodily health; for it is simply required of her to understand and apply the laws of their being, and her intelligent nurture will be rewarded by seeing them grow up around her in health, and living to be a comfort and support to her old age. And a similar knowledge and application of the laws of health, will enable her to pass her own critical periods in comparative freedom and safety; and to conduct her daughters through their crises with little difficulty, and with the most happy results. And by the proper instruction of those daughters in the nature of their sex, the purposes of their organization, and the duties of marriage and maternity, these daughters will not approach their responsibilities with so much of the sad ignorance that now prevails; but they will enter upon them with a full appreciation of their exalted nature, and of the sacred trusts and high prerogatives committed to them. Two or three generations would thus find the human family better endowed from birth, better

nurtured during infancy, and growing up to adult life with a vigor of constitution which would impress its physical and mental prowess upon the entire race.

These considerations will at once convince every woman, of the profit she may derive from a knowledge of her own frame in health and in disease. They make it unnecessary to offer any apology for presenting them this little volume upon these sub-While the more complex questions in physiology, in the nature of disease, and the measures for cure, must of necessity be left to the professional man, he can never take the mother's place in those hourly watchings and advisings which are necessary to the protection and guidance of her daughters. To her, then, belongs all that knowledge which is necessary to enable her to discharge those private obligations due to her children; and by the possession of which, she will understand where professional consultation is proper, and be prepared to carry out the directions of her medical adviser with that intelligence which is so necessary to the success of his efforts.

## CHAPTER II.

### INFLUENCE AND PECULIARITIES OF WOMAN.

In speaking of the influence and duties of woman, Dr. E. J. Tilt, of England, has expressed our own views in such a clear and happy manner, that his language should be given almost entire:

"Napoleon said, the future destiny of a child was always the mother's work. This sentiment has been that of many philosophers, who have noticed that every great man has had a mother above the ordinary level of mental capacity. It will be likewise observed and felt by all, that the degree of fixity of moral principle through life, depends principally upon the manner and upon the earnestness with which such principles have been inculcated by a mother. . . . Thus when we speak of woman's proud position in the world, it is not comprised in the mere facts of conceiving, bringing forth, nursing, and fostering the child; but she is the mother of his intellect as well as of his body, and has to preside over its dawn, so as to enable it to remember itself, and to disclose its latent powers by means of language. She is, likewise, the mother of the moral man; and has to call forth that moral light, and to develope those moral sentiments which, if fostered in early life, will never be eradicated.

"But all women are not destined to be mothers; and it would be taking a very narrow estimate of

the admirable utility of woman in the eirele of soeiety, to fancy her useless unless a mother. Humanity is not only a race requiring to be immortally perpetuated, but it is also a patient parehed up with fever and tossing about for weeks, months, or years upon a bed of siekness. Who but woman can watch by his side, assuage his pangs, pour comfort into his very soul, and bring him to life again? Is it not as meritorious to preserve life, as to give it? And this is what most women have it in their power to do, and really accomplish, whether married or single. For this reason, doubtless, women have been endowed with a greater degree of vital tenacity than men; and for the same reason, there are always more women than men alive in the world. And this excess of females continues through all the periods of life, and can not be explained by the special influence of a function peculiar to them; because it is found to precede the establishment of this function, and after the change of life the rule still holds good-a greater number of women than men attaining to longevity."

Facts in great abundance have accumulated in all sections of the globe; showing the superior tenacity of life possessed by woman over man, and illustrating the wonderful provision thus made by a beneficent Creator for the preservation of the human race. As woman is both the matrix and the nutrix, the moulder and the nourisher, of all mankind, an inferior vitality on her part would disqualify her for such noble offices. If it were a fact, that her peculiar organization made weakness and disease her

necessities, and that her peculiar functions entailed feebleness and early decay, then would the world have presented to it the anomaly of the Maker demanding a certain office without providing means adequate to the duty. But such an anomaly does not exist; and the peculiar duty of reproduction that is demanded of woman, is provided for by a superior endowment of vital tenacity. Let the idea be forever discarded, that woman is weak and inferior because of her maternal duties and their associate organism-that feebleness and disease are fastened upon her as constitutional visitations of God. Such notions are not at all supported by either the facts, or a confidence in the Creator's always adapting the means to the ends required. They are also derogatory to the female sex; and they blind the reason, and thereby prevent the wise removal of the true causes of woman's proverbial feebleness, namely: that her physical capabilities are imperfectly developed in childhood; and interfered with by ignorance and prejudice at puberty, during the whole period of the performance of the function peculiar to woman, and even at its cessation.

Yet there are constitutional differences between woman and man, apart from the peculiar distinctions of their organism; and those differences are precisely such as fit the female for the complete discharge of the sacred privileges which God has conferred upon her. She is smaller than man in stature; her bones are more delicate and small; the muscles are not so large and firm; there is a larger deposit of fatty materials, by which plumpness is given to

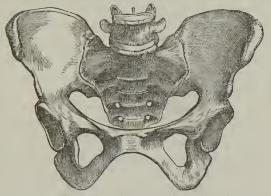
the contour; and all the tissues are of a finer and smoother texture. Comparatively, the eranium of woman is smaller than that of man; her neck is longer, and the points of her shoulders droop more; her ribs stand at nearly right angles to the spine, thus elevating her chest, and giving her a more prominent bust and a greater breathing eapacity; and her hips are wider apart, giving her an increased breadth at the erests of the haunch bones, of two inches beyond that which is common to man. The force of a woman's circulation is less than that of a man, but its rapidity is greater; her veins are more prominent; and her nervous susceptibility is much more intense. There is less force of action throughout her frame, but a far greater keenness and rapidity. These intensities of susceptibility and activity, have commonly been considered as both the failing and the reproach of her sex; but it is only when this nervous sensibility becomes diseased by the improper habits of society, or the unjust exactions and eruelties of man, that women suffer those irregularities in sensitiveness which now so commonly torture them.

Instead of being a reproach, these keen sensibilities are her just pride; for, while this delicacy makes the harp more easily untuned or broken, in them lies the possibility of that depth of tenderness and devotion which makes woman lovable beyond all of God's earthly creations, make her the sympathizer and comforter of man in all his struggles, and qualify her for those unselfish sacrifices which make her appear "but a little lower than the angels" in her

double capacity of wife and mother. Wanting such sensibilities, woman would be incapable of that gentle confidence which renders her so attractive to the opposite sex; incapable of enduring the restraints and inconveniences of her sex without a murmur; incapable of patiently foregoing the bustle of society for the duties and sacrifices of maternity; incapable of soothing and refining the rougher elements of man's character, or of setting him that example of quict self-denial and holy trust in God, which subducs his own selfishness and links him to things that are pure and heavenly. Wanting such sensibilities, woman would be as rough and strong and bold as man; but the human race would deteriorate for lack of her refining influence and her ennobling instruction, and society would not be long in reverting to its former barbarism. Then let no one offer to cast a reproach upon woman's sensitiveness; and in particular let no man laugh at the organization in whose peculiar delicacy is to be found his own greatest hope of earthly happiness. Let him rather prove his manliness, by using his superior strength to protect the help-mate who clings so confidingly to him, and seeks to repay his protection by a tender devotion that is beyond price; and let him ennoble himself by devising means for her physical improvement, and by encouraging her to seek that physical, mental and moral perfection which renders her so beautiful, but which can never be attained so long as his rude satire makes her feel her maternal duties to be a burden, and her natural sensibility a cause of shame to him

### CHAPTER III.

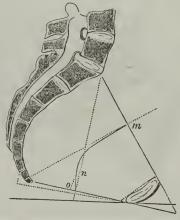
#### STRUCTURE OF THE FEMALE ORGANS.



THE PELVIS.—The wedge-like sacrum is seen behind; above it is the last bone of the true spine, the space between the light lines marking the point of their union. The irregular lines on each side of the sacrum, mark its junction with the innominata. The haunch bones, or crests, are seen rising like wings on each side of and above the sacrum. The arch of the pubes is the light portion in the front and middle part of the cut. On each side of this, the innominata run downward like small wings; and the large opening in each lower wing, is a foramen for the passage of ligaments, muscles, etc. The dark oval depression outwardly and upwardly from each foramen, is the deep socket for the head of the thigh bone.

Pelvis.—The term Pelvis is derived from the Greek, and signifies a basin. It means that association of bones which lies at the base of the spine and rests upon the thighs, and forms the haunches at each side and the share-bone in front. The back

part of the pelvis is called the *sacrum*. It is a continuation of the bones of the spine, and joins upon the latter at a blunt angle. The sacrum is somewhat like a triangular pyramid, with its point downward; its base, or upper extremity, is about four inches broad, and is very thick and strong; it forms a

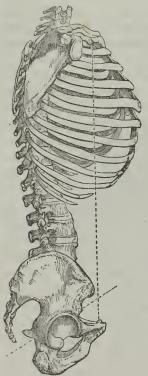


Sacrum and Pubic-Bone (Share-hone) cut through the middle from above downward. The two upper bones belong to the true spine. The blunt angle where the lower one of these meets two straight lines, is the promontory of the sacrum; and the deep curve made backward by the bones, is the hollow of the sacrum. The oval bone on the right of the cut, with a line passing above and below it, is the arch of the pubes.

curve backward, and is about five inches long. Joining the last bone of the spine at an angle, and there curving backward, it forms a blunt prominence on the front side, which is called the *promontory* of the sacrum; and the front side of the curve, which is within the pelvis, is called the *hollow* of the sacrum.

rum. The hollow is deeper in woman than in man. The sacrum is a light and spongy bone. At its lower end is a small bone, about half an inch long, called the *coccyx*.

The sides of the pelvis are formed of two bones; very irregular in shape, called the innominata or nameless bones. They join in front by running out into a strong and flattened arch, called the arch of the pubes. The upper two-thirds of each side turn outward slightly with an arch, while the lower third stands more nearly in a downward direction. The line or ridge along which these parts thus begin to assume their different directions, commences at the point where the innominata join the sacrum, there meeting a similar ridge that runs downward from the promontory; and then this ridge runs obliquely downward and forward to the pubes. It thus forms a continuance with the prominence of the sacrum, and is called the rim of the pelvis. Taken together, all the parts of the rim form a flattened circle, with its longer diameter lying crosswisc. The part which lies above this rim, is called the upper pelvis; and that which lies below it, is the lower pelvis. The tops of the side bones, at their back portion, rise above the level of the sacrum, and stand further apart in women than in men. These tops, or crests, are commonly called the haunch boncs; and in a . well-formed woman, the measurement is eleven inches across, while in man it is nine inches. The sides above the rim disappear at the front; but the sides below the rim are, on the contrary, most dcveloped at the front, and have a deep notch in them



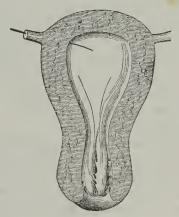
SIDE TRUNK.—The crest of the innominatum is seen covering the lower bones of the spine, with the sacrum running downward and backward in a strong curve. The perpendicular dotted line rests its lower end upon the arch of the pubes. The deep socket for the thigh bone, slightly oval in form, is seen covering the middle of the short dotted line; and below this is the lower wing of the innominata.

before they reach the sacrum. The innominate and sacrum are beyeled to meet each other; and by then lapping over each other, form a very broad and strong junction. The sides of the lower third of the innominata have deep sockets, in which the heads of the thigh bones move. Below and in front of these sockets are large openings for the attachment and passage of ligaments, etc. The entire pelvis of woman is not so deep from above downward as that of man; but it is broader from side to side of the rim, and wider from the pubes to either the prominence, the hollow, or the lower extremity, of the sacrum. From the promontory of the sacrum, its axis runs obliquely downward and forward. The sacrum stands between the two innominata like a broad wedge, and a

very tough eartilage joins them; and another tough eartilage joins the ends of the innominata where they run forward and form the arch of the pubes. These eartilages relax, and yield a very little during ehild-birth; but it is an error to suppose that the bones ever separate. The great muscles of the abdomen, which form the fleshy walls at the front and sides of the belly, attach themselves along the outer edges of the innominata-from their crests to the junction of their pubic portions. The lower sides are variously crossed by muscles and ligaments; and these form a strong yet yielding floor to the pelvis, and support much of the weight of the pelvie vis-These viscera, in woman, consist of the bladder, uterus and its appendages, vagina, and rectum or lower bowel. The bony ridge or rim already described, is called the inlet or strait of the true pelvis; the outlet or lower strait is the space between the point of the eoeeyx and the under surface of the arch of the pubes.

In measuring the inlet of the pelvis, it is found that, in the female, there is a distance of five inches from side to side on the rim; four inches from the junction (or symphysis) of the pubes to the promontory of the sacrum; and five inches across from the point on the rim where the sacrum and innominata meet, to a point on the inner wall of the further innominatum opposite its socket for the thigh. The depth of the pubes, from above downward at the point of junction, is an inch and a half. In the outlet, or lower strait of the female pelvis, it is four inches from the under side of the pubes to

the point of the coccyx, or perhaps nearly five inches from the considerable yielding of the coccyx where it joins the sacrum; and four inches from side to side at the two strong prominences lying below the sockets. These diameters vary but little in well-formed women, even in women of quite different stature; yet they may be larger; and they may also be considerably smaller without rendering child-birth impossible. A knowledge of the relative positions of the parts and diameters, is necessary to an understanding of the passage of the child during birth.



Uterus.—A sectional view, showing its walls and the somewhat triangular cavity within. On each side, near the top, is a portion of each Fallopian tube, with a wire passing through that on the left. The mouth is open.

Uterus.—The uterus, or womb, is the central organ of the female reproductive system. It lies in the strait of the pelvis, with its upper extremity

ordinarily on a line a little above the pelvie rim, and its lower extremity inclining a little backward. The bladder is in front of it, and the bowel behind it. Its length is three inches, or three and a half inches after it has once borne ehildren; its width from side to side is two inches; and its thickness from front to back is an inch, or a little more. It is narrowed from above downward, and bears the appearance of a flattened pear. The extreme upper portion is ealled the fundus; the contracted portion below, about an inch in length, is called the neck or cervix; the expanded part between these is the body; and the rim at the end of the eervix, with the opening in the middle, is the mouth or os tinca. The wall of the nterus is about an inch thick; and within it is a somewhat triangular space or eavity, the lower angle of which is extended downward through the os tineæ, and the upper angles through the sides into the Fallopian tubes. The cavity is lined with mucous membrane; and when the womb is empty, its inner surfaces lie in contact. The walls are made up of peculiar grayish muscular fibres, arranged in two layers running from the os tineæ upward, in a somewhat spiral manner, and having bloodvessels and nerves abundantly distributed through them. During pregnancy, the inner eavity of the organ enlarges to many times its original eapacity; the walls simultaneously distend and thicken; and the size of the bloodvessels increases in a correspondingly wonderful manner. After the birth of the child, the womb suddenly contracts its cavity very much, and gradually lessens the thickness of its walls; vet never, during the

menstrual term of life, recovers its original smallness. Before being impregnated, the organ weighs usually but an ounce and a half; but after child-bearing, nearly three ounces. At the full term of pregnancy, its own isolated weight is usually from three to four pounds.

The uterus is covered outwardly by two layers of a thin, tough, elastic membrane, which is continuous with the membrane that invests the abdominal viscera. At the upper part of the sides of the womb, this membrane passes off laterally into two broad folds, which hold between them the Fallopian tubes, ovaries, and uterine bloodvessels; and which then extend to the fleshy walls of the lower pelvis. These expansions are called the broad ligaments. Arising about the middle of the body of the womb, and upon its sides, are two tough, round cords, known as the round ligaments. They pass upward, and then escape from the cavity of the abdomen by the narrow opening which exists in the abdominal muscles in each groin, above the outer part of the pubes; and from this opening these ligaments run downward and lose themselves in the fleshy prominence above the junction of the pubes. The broad and round ligaments together serve to support the womb in its position; and prevent it from falling, or being pressed downward by the weight of the viscera above it.

The inner surface of the uterus is always slightly moistened with a mucous secretion. In some instances, this secretion becomes very profuse, and then constitutes one form of leucorrhea. The men-

strual discharge comes from the inner surface of the womb at each monthly period. The eavity receives the ovum or female egg from the ovaries; and when this egg is impregnated, it lodges within the womb till the child is developed. The muscular contractions of the womb, aided in a measure by the contractions of the diaphragm and muscles of the abdomen, expel the full-grown fœtus. The mouth of the womb is closed till the advance of puberty establishes the menses; it opens from one to two days before each monthly flow, remains open till fourteen or sixteen days after the cessation of the flow, and then closes till the next monthly period; and it is usually closed during pregnancy.

Fallopian Tubes.—These are two slender tubes varying in length from four to five inches, one appended on each side of the uterus near its upper extremity, and perforated with a minute canal which is continuous with the upper angle of the uterine cavity. The outer extremity of each tube terminates in a series of small divisions resembling a fringe. This fringe is supposed to grasp the ovum in the ovaria, (next to be mentioned), and to remove it thence into the Fallopian tube, which it traverses to the uterus.

Ovaries.—The ovaries, or ovaria, are two flattened bodies, one on each side of the uterus, and connected with the womb by a rounded cord about an inch and a half long—springing from the side of the womb just by the Fallopian tubes. Each ovary is about an inch in length, oval, flattened, of a smooth and shining surface, flesh-colored and somewhat soft

within. They hold embedded in their structure from ten to fifteen small, roundish bodies, which are ealled ova or eggs in a mature state; and a vast number of the same which are never perfectly developed.



UTERUS AND APPENDAGES.—The womb is partly vailed in its peritoneal membrane. The frimbriated end of each Fallopian tube is seen turned upward—that upon the left being extended, and that upon the right grasping the ovary. A portion of each rounded ligament hangs down on the sides. The inner surface of the vagina is partly exposed, and the mouth of the womb (os tineæ) is seen at its upper extremity.

These ova are the portion furnished by the female at conception; and when one of them is impregnated by the male semen, it attaches itself to the inner wall of the uterus, and proceeds to the development of a fœtus. A mature ovum, while within the ovary, is less in size than a small pin-head, soft, and pale-yellow. One of them is detached and discharged through the Fallopian tube within a limited number of days after each menstrual period—at which times the ovaries and tubes seem lifted up with a species of excitement, while at other times

they hang sluggishly down between the folds of the broad ligaments.

The ovaries, from furnishing the germs of human life, are considered the controlling organs of generation. Their excitement, disease, or absence, influences the sympathetic action of the entire body; and their decay or loss in early life, will give the woman a distinct masculine coarseness of appearance and taste, though all the other sexual organs be in perfect condition.

Vagina.—This is the passage that leads to the uterus; in length varying from four to six inches; composed of elastic tissue capable of very great distension; lined with a mucous membrane secreting a little mucus, and suffering one of the commonest forms of leucorrhea; moderately sensitive; curved a little forward and dilated at its upper extremity, and inserted into the outside of the neck of the uterus nearly an inch above its mouth.

External organs.—The pelvic viscera thus far described, are called the internal organs of generation. The following are called the external organs: Mons Veneris, a fleshy eminence in the front of the pubic junction. Labiæ or nymphæ, two large and two small folds of flesh; largest and thickest above, and tapering downward; the first pair forming the vulva or outer female entrance, the second pair being small folds just within the others. Clitoris, a small, elongated organ, situated on the lower front edge of the pubes and just behind the angle formed by the smaller pair of labiæ. It is about three-fourths of an inch, sometimes an inch, in front of the entrance

to the bladder—this entrance (called urethra), being under the edge of the pubes and just forward of the



The Pelvio Organs—side view.—Beginning on the right of the cut, the curved sacrum is seen next to the flesh; and the angle of its promontory is shown at the upper end of the curve. Next to the sacrum is the lower bowel (or rectum), laid open through its lower two-thirds. Next to the bowel, and about in the center of the cut, is the small uterus, of a narrow oblong form, terminating below in the vagina. The vagina (slightly curved) contracts at its lower end to the position occupied by the hymen. The large and nearly circular organ next to the left from the uterus, is the bladder distended with water. The lines forming a small oval in front of the bladder, is the symphysis pubes.

vagina. Hymen, a small fold of membrane, usually in the shape of a half moon, stretched across the back part of the entrance to the vagina. Sometimes it is entirely wanting, and its absence is not a proof of unchastity.

Deformities .- The organs as thus described, are

as usually found when natural. They are all subject to variations, which are sometimes so great as to constitute deformities. The pelvic bones may be mal-formed at any point; and if the lower diameters are narrowed to three and a quarter inches, the birth of a full-grown fœtus is hardly possible. The uterus has, in a few instances, been found to consist of two scparate cavities; and this is supposed to be the case when a pregnant female continues to menstruate, though a double uterus is not necessary to this act. The vagina is at times but an inch or so in length, and extremely narrow—not admitting copu-The hymen is occasionally circular, with an opening in the middle; and so very dense, that sexual intercourse can not be effected till the surgeon's knife has severed it—an extremely simple and painless little operation. Sometimes, as already intimated, one or both ovaries may be wanting, or may contain no eggs-in either of which cases, the woman presents a masculine appearance and voice.

# CHAPTER IV.

## FEMALE DEVELOPMENT.

### THE PERIOD OF PUBERTY.

Until about the fourteenth year of life, the girl is comparatively a child; with more sensitiveness and less robustness than boys, yet with very little clse to distinguish her from the opposite sex. But about her fourteenth year, or mayhap, in this climate, a year later, or in some temperaments, and under peculiar circumstances hereafter to be mentioned, a year or more earlier, she commences that development of her reproductive system which is to prepare her for the duties of her sex, and which is accompanied by a rapid transition from girlhood with its simplicity, to womanhood with its maturity. From infancy up to this period, the sexual organs remain so dormant as scarcely to increase in size; and thus perform no function, and exert no influence upon either the body or the mind. But now their growth is rapid; the entire system enters into sympathy with them; the intellectual, domestic and moral faculties undergo great changes in concert with the sexual development; and the entire future of the budding woman-as affects both her constitution and her mental peculiarities-will depend very largely upon the influences which impress themselves on her at this time. From four to six years may be occupied in completing this new development of organs and functions, which embraces, first, the establishment of the menstrual function; and second, that ripening of both the mind and body which is necessary to qualify the woman for reproducing her species, and for conducting the sustenance and education of her offspring. The time thus occupied is called the period of puberty. As it is a period full of strange agitations and impulses to the girl; and one which may terminate happily or seriously, according as it is wisely or imprudently gnided; every woman should be thoroughly acquainted with all its signs and peculiarities, and with the circumstances which may exert upon it either a favorable or unfavorable influence.

It is always a subject of regret among judicious medical men, that mothers attach so little importance to the proper regulation of this period. Some are disposed to consider it too delicate a topic for them to meddle with; as if such a false delicacy could do away with the functions of nature, or forestall the necessity of understanding a function which her child may have to perform some four hundred times in the course of the next thirty years, or repay the child for that loss of health and happiness which may grow out of an hour's ignorant interference with nature. Some are disposed to let it alone, and allow nature to take care of herself; shutting their eyes willfully to the many and serious dangers that unguarded and unguided nature may fall into during this period. And still others think the medical man alone should be interested in such questions; as if he could supplant the intimate relations a mother

bears to her child, or as if his art could mend the constitution which the unwitting and unguarded child may have broken hopelessly. All such notions are mistakes; and they are mistakes which too often lead to serious consequences, and are steadily undermining the health and strength of American women. Dr. Meigs, an eminent writer and professor of Philadelphia, makes the following very suitable remarks upon this topic:

"Certainly, in this country at least, too little regard is paid to the dangers of this crisis; and when the threatening consequences of misapprehension or mismanagement have become startling, those fatal changes are attributed to some trivial cause, and the victim passes away to the sound of the belland no increase of knowledge is acquired by this mournful experience, to stand in the way of the next victim to a management as unwise and as thoughtless. If wise care be not taken of the health of the growing females of a family, physicians will have the pain of witnessing their early subjection to dangerous and fatal disorders; or else to scc them, subsequent to puberty, suffering those derangements of health which render them almost useless to their friends, inefficient as the heads of families, and unfit to encounter and discharge the stern obligations and duties of life. Many are the examples we could citc of adult and married females, who labor under the effects of a badly-passed puberty-showing these effects in an over-excitable circulation, excessive nervous susceptibility, painful menstruation, sterility, and the impatience and discontent that necessarily

wait on feeble health and disappointed expectations. And, while some of these finally recover under treatment, others fall into weakness, and at last become victims of menorrhagia, consumption, or other serious disorders."

It is because this period is one of restlessness and susceptibility, and one in which every power and faculty of the girl's frame are struggling simultaneously for their full development, that it becomes a period of great danger; a period that demands the most constant and judicious watchfulness, lest development be crippled, and both physical and mental growth be perverted into deformity. The task of guiding to maturity the girl's body, as well as her mind, and her moral and social facultics, is a sacred duty which devolves almost exclusively upon the mother. If the mother would see her daughters attain the perfection of womanhood; see them blest with good health, a clear intellect, and pure moral and social feelings, she must understand the dangers of this period, and be prepared to guide her daughters through it with that judiciousness and firmness which can come only from sound information on the nature and requirements of the changes now effected in the system.

#### SIGNS AND DEVELOPMENTS OF PUBERTY.

From the tenth year till the changes of puberty commence, is a sort of transition period to the girl; and during this time, she is free from cares and anxieties, sees life under its most brilliant colors, and is (if at all in health) full of joy and versatile gayety. Bodily growth may seem at a stand; but as puberty begins to draw near, the child commences to shoot up rapidly, her speedy (but tender) growth becomes very noticeable, and the increasing size of her breasts and fulness of her limbs, can not escape a mother's attention. Her form soon begins to change its girlish smallness and looseness, for a womanly firmness and elasticity. Her features become more fine, and have a more established expression; her voice becomes melodious and sonorous; her tastes, conversation and companionship are no longer those of a child. The unhealthy, scrofulous, chlorotic and over-excited, may grow tall and slender, and pale and weak; but these are the consequences of feebleness; for the healthy girl puts on plumpness, ruddiness, and a new and unknown vigor.

These changes occur simultaneously with the rapid development of the breasts, uterus, ovaries, etc. A year or eighteen months effect the majority of these changes—though, as before mentioned, the completion of the growth, and the solidification of the frame, may require from four to six years. The rapidity of development is much hastened by a rich and stimulating diet, indolent habits, mixed (and particularly gay) society, close intimacies with the other sex, theaters and operas, light reading, etc. On the other hand, the development may be made to advance slowly, by a judicious combination of study and labor, girlish (and mostly junior) companionship, plain and very regular diet, early sleeping and rising hours, deprivation of mixed society and

novels and seenes of gayety, and by all other influences which invigorate the body and keep the nervous system quiet. It is very seldom, at least in this country, that these girls need to have their development hastened, and the rare cases which require such management, will be mentioned hereafter. The present great danger with American females is, that their habits may develope them too rapidly-eausing them to grow up quickly, but without allowing them that time for solidification which nature demands ere she can form a strong woman. The judicious mother will never urge her child forward, unless there is some peculiar sluggishness or insufficiency of constitution which demands it. She will rather hold back her daughter, and not hasten the child into an unripe woman-a course which can not fail to entail weakness and suffering. Unfortunately, the social habits of our country favor a too rapid development; and mothers have a hard task to impose that physical and social restraint and discipline which are necessary so to mould their daughters as to secure to them strong bodies. And it has become too "fashionable" in some circles, to despise the firm limbs and ruddy cheeks of good health; and to pursue those stimulating excitements which hasten the growth of body and mind because they ensure the feebleness and paleness which some silly people affectedly admire. But no woman who is possessed of solid sense, can sanction such absurdities, and such health-destroying customs; hence the mother of sound judgment will begin in season to exercise over her child those

prudent restraints which are necessary to secure healthy womanhood and sound old age.

### MENSTRUATION.

When the generative organs, the pelvis, and the breasts, have attained their full development, there is an increased excitement of the uterine organs; and an engorgement of their bloodvessels, and of all the bloodvessels leading to them and in the region of the pelvis. This increase of excitement and vascularity presently leads to a discharge from the uterus of a fluid resembling blood in all respects, except that it will not coagulate. This discharge is called the menses, catamenia, and menstrual or catamenial flow. When regularly established, it recurs once every twenty-cight days or each lunar month, continues from three to five days each time, leaves behind a transient sense of lassitude, and continues to be repeated for about thirty years-or usually till the forty-fifth year of life. It most commonly appears in the fifteenth year of life; but may occur as early as the twelfth year, and in a few girls and in warm latitudes it has commenced in the tenth year. It most generally recurs at either the full or the new of the moon, and from this circumstance was supposed to be governed by the moon; but it is well known that females menstruate at all periods of the month, without any reference to the lunar changes. The quantity discharged at each time, is from four to six fluid ounces; but women may differ widely in this respect, and yet be in perfect health. The menstrual flow does not cease, except from discase

or pregnancy, till the natural period of the change of life; but even during pregnancy, the flow continues somewhat regularly for a time, in a few rare cases. While the flow usually ceases about the forty-fifth year, it may discontinue earlier, especially when it begins earlier than the fifteenth year; and in some cases it continues much later, as will be mentioned in the chapter on Cessation of the Menses. To be regular in the menses, implies their stated reappearance, and their customary quantity; yet all the exceptional irregularities do not witness to disease, though ill-health is to be apprehended in any case where the departure from the ordinary standard is great or continuous, and in some cases much concern should be felt at even slight departures from regularity.

Period of establishment.—The occasion of the first appearance of the menses, is one of great agitation to the girl's nervous system. For some days, weeks, or even months before, she is peevish, irritable, excitable, hysterical, cheerful, tender-hearted, coldhearted, generous, selfish, and in every way mentally unaccountable. She is persistently troubled with headache; and this is accompanied by more or less giddiness, heaviness, and disposition to sleep. Complaints of a stupid feeling, a bewildered feeling, loss of their senses, dimness of the eyes, temporary loss of memory, and sometimes a desire to sleep all the time or to fall down and sleep anywhere, become more and more frequent. The child may even appear and act as if truly stupid; and may suffer harsh treatment from thoughtless or ignorant mothers,

because they seem "dumb," or "have no wit," or "can't remember anything," or "forget what they are about." But this dullness of mind is natural to many in the present disturbed condition of the system, and few girls escape a painful degree of these symptoms. Some become so changed that they involuntarily let fall anything they may be carrying, fall themselves on stooping, become sleepy almost to a point resembling intoxication, have convulsive twitchings and even hysterical fits, and suffer from frequent and causeless faintings. These more severe symptoms are likely soon to be followed by the appearance of the flow; and this is often ushered in by swelling of the ankles, bleeding at the nose, flitting pains through the limbs, and pains and heaviness in the loins, small of the back and lower part of the abdomen. The appearance of the flow, which is frequently sudden, gives full and immediate relief to these symptoms. So long as the menstrual function lasts in life, each periodical return is preceded by some symptoms of excitement, or lassitude, or pain, even when healthfully performed; and the starting of the flow brings relief.

The first time the menses appear, they are very apt to occasion the girl a fright, unless she has previously been informed of the existence of this discharge among women, and the probability of its soon appearing upon herself. Mothers and guardians are peculiarly averse to imparting this information to girls; but seem to prefer that the young woman should find it out by accident, or learn it from lips that may be more lewd than wise. This is an un

justifiable course for a mother to pursue, as will be told her by any medical man of judgment. To say nothing of the opportunity she loses for establishing the most endearing and lasting confidence between herself and her daughter, and of giving that daughter's mind a pure and reasonable tone, as relates to this important function, she exposes her child to injury by leaving her ignorant upon this subject. The young woman may insist upon pursuing habits of eating, sleeping, reading, etc., which are calculated wholly to unfit her system for the establishment of this discharge; and, as her emotional nature is now greatly predominant, she can not be guided into a rational and safe course of living, simply because her reason (unaware of the existence of this function) can not see any necessity for such restraints upon appetite and pleasure. Or when the flow is about to come on, she may unwittingly check it by some exposure to storm, or dampness, or wetting of the feet, or sudden change of temperature and disturbance of perspiration; and such a check may lay the foundation of some serious malady, as chlorosis or consumption, or even cause early death. Or if the flow appear suddenly, her nervous system may receive a shock by fright, from which she may not recover so long as she lives; or she may attempt, with cold water, to wash away or stop the unseemly discharge, and thus suppress the flow to a degree that may lay the foundation for years of suffering, or for some incurable malady.

Dr. Tilt, in speaking upon this subject, presents the following forcible facts: "From our statistical

inquiry, deduced from the cases of nearly 1,000 women, we find that 25 per cent. (or 250 women) were totally unprepared for its appearance; that 13 of these were much frightened, screamed, or went into hysterical fits; and that 6 of the 13 thought themselves wounded, and washed with cold water. Of those frightened, the flow was checked in 7 instances, was never restored in 3, and the general health of all was seriously impaired. Of those who washed with cold water, 2 effectually suppressed the flow, which only reappeared after several years, and then at irregular intervals, and was never healthily established." So well do medical men understand such, and even worse, consequences of ignorance among girls, that no feeling and wise mother can disregard the fine words of Dr. Dixon: "In such language as a mother alone can use, and with a purpose as pure and holy as she alone can feel in the discharge of that duty, let her communicate the fact, and (as far as she shall judge expedient) the end and object of nature in this novel and extraordinary change. Much useful counsel and caution, that may save many a heart-felt grief to both, may be communicated by a mother to an intelligent child, without raising a blush upon the check of either; and very dear, in after life, will be the reflections of both, if this duty be faithfully performed."

At the first term of the menstrual flow, the discharge may be quite scanty, and mostly pale. This is particularly so in delicate girls, and in those of a scrofulous tendency, of a lymphatic temperament, or an inclination toward chlorosis. Sometimes, in

such persons, the first few monthly terms may present no colored show whatever, but merely a flow which seems to be only a leucorrhea; and such a girl may contract marriage, and become enciente, without appearing ever to have had her courses. Such facts should put both mother and daughter on their guard, and keep them from using measures to suppress a leucorrhea when it occurs periodically for a few days at a time, during this term of life. The leucorrhea takes the place of the true menses; and while it shows that the system has not reached the point where it can perform this functional duty aright, the leucorrhea must no more be suppressed than if it were the eatamenia proper.

The regular appearance of the menses is not always established at once; and the function often does not become settled, till two or three years after the first flow. It may occur at monthly intervals for a time, and then disappear for two, three or more months; or it may not return for several months after the first appearance; or it may return somewhat. regularly each six or eight weeks; and these variations may undergo numerous changes. Some robust girls do have the discharge with perfect regularity, after the first term; but this is rather an exception Warm climates favor both the early than a rule. appearance, and the abundant and regular performance, of this function-sometimes producing a flow almost like a hemorrhage, and continuing it for ten or twelve days; while cold climates retard the first appearance, make the flow itself scanty, and protract the intervals between the periods. Dr. Lec

says that, while girls in southern Europe may begin menstruation as early as their eighth year, women in Lapland may not flow till twenty-five or thirty, may discharge but a couple of ounces, may cease after a show of a single day, and may menstruate only in the summer months. Linnæus says he knew women in Lapland who menstruated but once a year. Some women (especially those of strong impulses), may menstruate every second week; and occasionally there is found a woman in sound health, who never menstruates at all. These facts must be carefully borne in mind; for such anomalies, arising from climate or constitution, are not then signs of ill-health, and need no interference-though a departure from the ordinary custom of any latitude, will work similar grave consequences, the world over.

A girl used to society and high living, may have the courses appear prematurely, or before the system is strong enough to endure such a drain; and then the regular and healthy establishment of the function, may be delayed by lack of vitality or full bodily development. A change of pursuits may, for a time, stop the flow; journeying or a sea voyage will very surely do the same, and may check the eatamenia for several months, even in mature women; and a change of residence, such as going from home to school, and returning home from school, etc., will nearly always do the same in girls. The suppressions arising from the latter influences, are not likely to cause the least injury to the health; and the mother should never be tempted to interfere with

such variations, until satisfied that the child is suffering therefrom. But if the daughter is studying too sedulously, and exhausting the energies of the system through the brain, or living a too luxurious and indolent life, there may follow a suppression which demands a radical treatment by hygiene—as will be mentioned hereafter.

So long as these spontaneous variations of time and quantity are occurring, the physical organization has not been completed; but so soon as this function becomes habitually regular, the development of the frame is finished. But even then, the necessary compactness or solidity has not been attained; and the mature firmness of body and mind has not been reached. The tissues are yet too tender, and need years to give them hardness equal to the full duties of life; the emotions are yet too excitable, and need years to effect that ripeness of the reasoning powers necessary to the discharge of the responsibilities attaching to maternity. Impreguation is possible at the first appearance of the catamenia; but maternity demands far greater and more noble powers than this mere capacity to develope an ovum. The establishment of this discharge, therefore, does not imply ripeness of either body or mind; but a period of from four to five years is required, after the menses become perfectly regular, to give the new woman that solidification of organism which is necessary before she can attempt the duties of a mother with either safety to her own health, or security to the health of her offspring.

Source and Object of the Menses .- The menstrual

flow is chiefly owing to the great influence exerted by the ovaries over the womb and the entire constitution of the female. If these organs are defective from birth, or become lost by disease, or wasted by an unnatural or natural withering (as at the turn of life), the menstrual function ceases. The ovaries being the origin of the ovum or egg, which is the germ of the future being furnished by the female, they become the pivot upon which turn all the fewale organs of reproduction. It has been found that, during the menstruating period of a woman's life, lasting ordinarily for thirty years, the ovaries detach and cast off one ovum each lunar month, or every twenty-eight days. This ovum is eaught by the extremity of one of the Fallopian tubes, and is passed through that tube into the uterus. It is also found that this periodical detachment of the egg, occurs at or soon after the cessation of the catamenia; that the egg always escapes from the uterus within fourteen days after this flow has stopped; and that the mouth of the womb closes after the ovum is expelled, and does not reopen till a day or so before the reappearance of the monthly flow. Sometimes the ovum is washed away with the menses, and sometimes two or more are discharged at one period. It is also found that, if the ovum is met in the womb by the male semen, impregnation takes place; and then the menses cease, and do not return (except in a few anomolous cases) till after the birth of the child and the completion of its suckling.

These facts show that the appearance of the menses depends upon the periodic action of the

ovaries (in the unimpregnated female) to place within the womb the rudiment or germ from which another human being may be developed. So long as this rudiment passes away unimpregnated, the aet of furnishing an ovum is regularly repeated; but when impregnation occurs, the irruption of blood which formerly constituted the menses, is now saved, and the vitality it represents is diverted to the development of the fœtus. Thus the ovaries preside over this monthly function, by a subtle and wonderful instinct which is God-given, and which man can not fathom; and attaches to the function a sacred character which, when properly understood by woman, should make her view it as the glory instead of the reproach of her sex.

As to the actual source of the flow, nothing more need be said, than that it is preceded by an engorgement of all the bloodvessels of the womb and the pelvis; and that it is made up of a discharge of blood from the lining membrane of the womb, mixed with the half mucous discharge which at all times moistens this membrane, and which is now more abundant than usual. This blood is derived from the very small vessels; it does not coagulate, as already mentioned; but if the womb is diseased, or excessive menstruation enfeebles the system, then the blood, or menses, may become eoagulable. More or less agitation and excitement of the nervous system, and perhaps pressure on the brain, precede the eatamenia a day or two; these feelings abate when the flow begins; the flow usually is small at first, increases gradually for two days, and then

MASHINGTON, D. C. U.S.

abates gradually; its constitution cach month is followed by a sense of languor for a day or more; and then there is an uncommon vivacity of the animal.

spirits for a week or ten days.

The period of menstruation is one of the most important of a woman's life; and the grand purpose with which it is associated, renders its uninterrupted performance a necessity of the greatest consequence. Whatever causes an unnatural cessation or interruption of this function, interferes with the central purposes of the female constitution; and the results of such an interference, if it is not soon overcome, can not be otherwise than disastrous. Young girls are apt to look upon the function as an inconvenience; and the young and the robust arc inclined to make light of the idea that its interruption may cause any scrious malady, or that the most scrupulous care should be taken to preserve its harmonious regularity. But all the experience of the world proves that this function can not be interrupted with impunity; and the woman who wishes to secure and retain sound health, must never cease her solicitude in relation to the prompt and natural return of this flow. Nor can too much regard be paid to the avoidance of even the least circumstance which may disturb it; and while the thoughtlessness and willfulness of girlhood may lead some young women to disregard every sensible precaution of hygicne, a lifetime of misery may be the reward of their folly. And as circumstances which affect the mind, as well as those which affect the body, exert a strong influence upon the general development

and health, parents can not too thoroughly understand and assiduously guard all the causes both of health and disease which may operate upon their daughters throughout the period of puberty.

# PEMATURE AND IMPERFECT DEVELOPMENT.

In our country, among the middle and upper classes of society, the artificial habits of life that commonly prevail, excite the nervous and generative systems of girls, and often lead to an unhealthy and precocious development of puberty. It may be gratifying to a parent to see her child as forward as a woman, and to hear the youth credited with the smartness of mature years; but the over-stimulation by which such premature blossoming is secured, exhausts the vital energies, undermines the health, and fosters passion and impulse at the expense of reason.

Among the influences which thus accelerate puberty, the following are the most common: The free use of meats, gravies, pastry, puddings and their sauces, coffec, and such stimulants as nutmeg, pimento, cinnamon, cloves, horseradish, mustard, etc. All these things are directly exciting to the reproductive organs; and if to these be added a rich style of cookery, soft beds, late hours of retiring and rising, and very little muscular exertion, the effect must be injurious—even upon sluggish temperaments.

But the intellectual and moral influences are often still more pernicious than these physical ones. Mixing early and freely with adult and promiseuous company, with its late hours and dallying conversations, is one of the most common of these. Large parties, balls, daneing-schools, theatres, operas, and the operatie style of music, all favor the hot-house growth of the generative organs, and inflame the erotic feelings beyond what is either prudent or safe for any young woman. Novel reading, that most common and most warmly defended of all fashionable reereations, (now worming its way into the very literature of our sabbath-schools), is one of the worst of all these preternatural stimuli; and no medical philosopher, or judicious observer of human life, will fail to give his testimony to the baneful influence this kind of reading exerts upon both the menstrual function and the amorous feelings of young women. And too many times do such combined influences exeite the imagination and set fire to the passionspaving the way to the secret practice of onanism, or preparing the mind to rush into elandestine marriage and its subsequent life of sorrow. People need not wonder that so-called "fashionable society" furnishes so many instances of social looseness, vice, and eriminality; for too many of the habits of that portion of society—with its frivolities, masquerades, operas, and general abandonment to gayety-furnish fuel to that preeocity of development and preponderanee of voluptuousness which sweep so rapidly to the whirlpool of corruption.

A young woman who becomes prematurely developed from the pursuit of any of the above habits, is liable to great nervousness, palpitations, thinness of form, paleness, hysteria, chlorosis, irritation and

caries of the spine, and a general early decay. The tissues can not become firm, dyspepsia and its train of ills can scareely be avoided, and no part of the frame is sufficiently supplied with pure nutriment. Such disturbances of nutrition, circulation, and the nervous centres, will inevitably enfeeble the constitution, destroy the beauty, and impair the mind itself.

On the other hand, in some constitutions, especially in those of a lymphatic temperament, there is a tendency to a very slow development of puberty; and this may become so great as to leave the young woman somewhat imperfect in this respect. Sometimes an imperfect development of the organism is congenital; as when the ovaries are so deficient as to leave the woman to grow up with a half-masculine frame, voice and tastes. Again, it may be hereditary; as when the mother has led a life of fashionable dissipation, and has married too early, and then has found herself a prospective mother without the ripeness and strength of body necessary to mould a healthy and perfect child. Some children are easily exhausted by sedentary habits, hot rooms, much study or reading, strong mental excitements, a too stimulating diet, and artificial sexual excitements; and such exhaustions weaken the constitution so much, that they interfere with the natural development of the reproductive organs and their functions. Such girls waste away with a sort of irritative fever and continuous languor; and are likely to die very early with hectic or consumptive symptoms. Still another class of girls will have their harmonious development greatly retarded by insufficient and innutritious diet; lack of sunshine and fresh air from living in damp, dark and close houses; and by the exhaustion of hard labor. Such are usually the children of the very poor, who are pale, stunted, and emaciated.

#### RULES FOR ESTABLISHING HEALTHY WOMANHOOD.

From what has already been said, two important facts will easily be understood, namely: 1st. That no woman ean be truly healthy without the full development of the generative organs; and the establishment of their menstrual function about the usual time, and in the usual manner, eustomary in the locality or climate where she resides. 2d. That this natural development depends upon the soundness and healthiness and vigor of the constitution, not upon the excitement of the generative organs alone. Thus there must be a harmonious development between the body at large, and the reproductive organs; and the insufficient growth or over-stimulation of either one, will make an injurious impression upon the other. As the few years embraced by the period of puberty, is the time when these several healthy developments must be seeured; the most unceasing and prudent guidance of the habits of body and mind throughout this period, is absolutely neeessary to the welfare of a growing daughter. Upon the correctness or incorrectness of all, even the most minute, of these habits, will depend the future perfectness and vigor of the woman; and upon her health and strength, let it again be said, depend

the health and happiness of the entire human race.

Medicines .- One great fault of our age and country, is the reliance upon medicine more than upon nature. The living powers of the human frame are far more wonderful, and more capable of preserving and restoring health, than is usually believed. Medicines are useful when actual sickness occurs, or when the frame proves too feeble to overcome all the adverse influences it may meet; but medicines can never secure health, while all the habits of life are conspiring to undermine it. This is a truth that should be remembered under all circumstances, and especially so in relation to the development of womanhood. The growth of the system at this time is a duty which nature is prepared to perform; and all she will usually ask, is non-interference. Very few indeed will be the cases in which any medicines will be needed, if the modes of living are correct; and the mother who is guiding the life of her child in accordance with the sound rules of hygicne, need searcely feel an anxiety as to the happy result. To resort to medicine for every little, transient complaining, is very unwise; and to turn the child's stomach into a sort of apothecary-shop, without waiting to see that the sufferings really come from permanent insufficiency of the frame, is an extremely foolish and pernicious practice.

One of the greatest temptations to the use of medicines, is the desire felt by the mother to see her daughter "all right." The fond parent concludes that the proper time for menstruation has come;

and then if the discharge have not shown itself, she concludes that "something is wrong," and forthwith eommences the use of modicine. If the daughter complain of some of those symptoms of languor, poor appetite, sleepiness, etc., which precede menstruation, the ease is at once set down as one calling for medicine; and by the use of some sharp drug, the courses are forced to appear—perhaps several months before the necessary state of growth had been reached. Such a practice must surely work mischief, and sometimes leads to fatal consequences. Dr. Dewees, of Philadelphia, relates the following melaneholy history of one of the many cases of the kind which he says have fallen under his notice:

"We too often eall to mind, with bitter recollection, the fate of a most amiable and interesting young ereature, for whom we were requested to prescribe for the expected menses, but who had not one mark that could justify an interference-more especially as she was in perfectly good health. 'She is fifteen, and it is time,' was all that could be urged by the mother in favor of an attempt to 'bring down the eourses.' We relied on the good sense of the anxious parent, and freely explained ourselves to her. She left us, apparently satisfied with our reasoning, and we heard nothing of the child for six months; when, on being suddenly summoned to attend her, we found her throwing up blood in eonsiderable quantities from the lungs, of which disease she died in a few days. The distracted mother told us that, though she appeared satisfied with what we had said, she felt eonvineed we were wrong, and that her daughter's health required the immediate establishment of the menstrual evacuation. With this view, she determined upon trying a patent medicine of some celebrity in similar cases. She gave it according to the direction, and in a few days the daughter became feverish, lost her appetite, and suffered from nausea; her strength gradually diminished, and she was soon confined to her bed. The mother called in the quack doctor who prepared the medicine, who told her to persevere. She persevered; and in a few days lost an only and a lovely daughter."

Dr. Tilt, one of the most reliable of English writers upon these subjects, gives the following advice and illustration on this same pernicious habit of

resorting hastily to forcing medicines:

"Mothers are not sufficiently aware that they have no right to try experiments on their daughters, even in ease the accustomed tribute (after its first appearance) should not be paid with due regularity. Its cessation may depend on a cold, or on some more serious disease, which would only be increased by the means usually employed to promote the menstrual return. This return can be safely effected only by the adoption of such treatment as may check the disease itself; and this is at times one of the most complicated problems of medical art.

"We were lately consulted by a lady who was justly alarmed about her daughter's health. She was a delicate, pale-faced girl, with light hair and blue eyes, and very tall and slender. The courses appeared at fourteen, without any previous disturbance; and had proceeded regularly for two years,

but were sometimes scanty, at others profuse, and always attended by much pain. They then ceased without any apparent cause except debility; and after their absence for several months, the mother repeatedly gave purgatives-which increased the debility, but did not bring on any return. She then administered cake-saffron in pennyroyal tea. This was followed by spitting of blood to so alarming an extent, that the mother called in a medical man; who adopted measures which checked this occurrence, and very properly told the mother he would not answer for the patient's life if she continued to manage her daughter in so inconsiderate a manner. The girl's health improved, but always remained delicate. At times she was troubled with a cough, and as the courses had not returned, we were consulted. The girl is 18, consumptive; and little hope can be entertained of her recovery. There is no consumption in the family; and we believe this disease would not have been developed, if it had not been for the perverse love of giving medicine."

The imperative need of strict hygiene, and of great circumspection in the use of medicine, during this period, is thus spoken of by the eloquent Dr. Dixon, of New York:

"No one suspects that medicine exerts any influence in producing menstruation, in those countless thousands of cases that occur in those classes of society where the female each day, after a hasty and insufficient meal, commences labors which are often continued into the hours proper for sleep. Here is brought into action every circumstance that can ex-

ercise a tendency to hinder the attainment of the great end; yet amidst all sorts of depressing influences; the young female at length becomes regular. It is thus evident that nature is all-powerful. She means to accomplish her purposes and no slight circumstances will prevent it.

"Now suppose any of the exhausting causes we have enumerated, are brought to bear upon a young girl. Suppose her nervous system to be constantly taxed by too much excitement of stimulating food, spices, winc, etc.; her body debilitated by excessive quantities of clothing, impeding the healthful expansion of the lungs; whilst she is severely taxed by the absurd requisitions of a school-mistress, who deprives her of healthful exercise at a period when she most requires it. The inevitable result will be, that the blood, instead of an equal distribution over the surface of the body, will be thrown upon the internal organs. A premature establishment of the menses, is the consequence; and the pale and sickly plant that has been grown under the influence of too much heat and water, and too little light, is but an emblem of this young female. In neither the girl nor the plant have the requisitions of nature been filled; and both present the same consequences, namely: great exhaustions and debility, that can be overcome only by a careful attention to nature's demands. The class of medicines called tonics, may, in judicious hands, aid her restoration; but they never can effect it without carefully retracing and remedying (as far as possible) the errors of early life. Nutritious and unstimulating food, free exercise in the open air, with a hearty enjoyment of all innocent recreation, should be the means chiefly relied upon.

"The administration of some of the more gentle medicines, may become necessary, from the impossibility of at once regulating the regimen of the patient; and we do not object to their use, where given with the view of putting the body as soon as possible in a condition to dispense with them. It is the use of stimulating and specific drugs, that we so much deplore—such as are intended to force nature. This they can never do, without inflicting great injury."

In the subsequent sections of this work, when treating of chlorosis, the derangements of menstruation, and other maladies of the female which may occur during the period of puberty, we shall consider it the *first* necessity for the mother to guide her daughter through the rules of good hygiene now to be given; and *after* that, to use the milder class of medicines according as they are indicated.

To procure a Firm Constitution.—Young women living in the country, usually pass from girlhood to womanhood with little disturbance of body or mind; while the inhabitants of citics seldom emerge from puberty without a variety of temporary agitations and weaknesses, and a strong liability to some form of permanent suffering. Even in the country, however, many young women are liable to nervous and menstrual diseases through this period, in consequence of over-work, exposures, low situations, the excessive use of salted meat, etc.; so that to

both classes, the best rules of hygicne arc of much importance.

From the several intimations already given in this chapter, the means for procuring a harmonious development of the entire system, and establishing a firm constitution, might readily be inferred; but these measures may be more fully detailed under the separate heads of Food, Clothing, Exercise, Bathing, Sleeping, and Mental Regimen.

I.—The first grand necessity of a girl's life is, a regulation of her food. This regulation might be included under the simple expression: Use a plain diet. But there are some who insist that their diet is plain, when they habitually use meat three times a day, coffee twice, rich puddings or pastry daily, etc. This is not what the medical man calls plain living. Tender and fresh meat once a day, plainly cooked; coffee in moderation once or twice a week; tea but very little; a plain bit of pudding or pastry once or twice a weck; no ale, becr, or wine at any time; no spices, condiments, or rich sauces and stimulating relishes; salted meats, fish, and nuts at rare intervals, if at all—this constitutes a plain diet, such as any person will grow strong upon, and preserve their digestion and retain firm nerves by its The ripe and sweet fruits, and the succulent vegetables, may be indulged in liberally; milk may be used freely, unless found to disturb the bile and induce headache; all meals should be taken at most regular hours; nothing whatever should be caten between meals, not even fruit; the appetite should not be tempted by niceties; the suppers should be

particularly sparing, and taken early so that the stomach may be ready for breakfast the following morning; very cold or very warm drinks should not be used at any time; ice and iced drinks and creams are very detrimental to the stomach and digestion; and the less drink used during meal-time, the better.

Such a diet may appear like a hardship to many; and they will be ready to exclaim that they can not live without this article, or they would die without that. Such a passionate craving for things which professional experience has found improper for health, shows that the appetite has already become much perverted; and that the necessity for an immediate and radical change in the habits of living, is importunate. If girls have not sufficient moral courage to make such a change themselves, or parents have not the courage to make it for them, the severe penalty of indulgence must sooner or later be paid. What that penalty will be, may be inferred from remarks already made in this chapter; and may be still more clearly understood in contemplating the well-known facts thus stated by Dr. Parry concerning the inferior animals: "Singing-birds and lap-dogs, which are highly fed and kept in confinement, are subject to a whole train of nervous affections, such as palpitations of the heart, loss of breath on slight motion, hysteria, convulsions, epilepsy, hemiplegia, and apoplexy." The young woman who would acquire health and vigor, must practice continuous self-denial in matters of appetite; and must accustom herself to that plain style of food which will soon bring to the pampered stomach a keen rclish of the simple and wholcsome fare above advised.

II.—The clothing of a woman is second in importance only to her daily food. A medical writer can scarcely hope to make much impression upon the ladies' minds about this question; for too many of them practically bend to the current saying: "Better be dead than to be out of fashion." Yet there are some plain facts about clothing, which no woman can neglect with safety; and growing girls are particularly under the necessity of paying strict regard to them, if they would live to see themselves mature women.

The clothing should always be sufficient to protect every part of the person against changes of the weather. In a climate so variable as ours, this will require much watchfulness. Low-necked dresses, insufficient under-garments, and thin shoes, are the great errors of the day in clothing. The statistics of the physician's private practice, record many thousands of young women, in the height of vigorous and ruddy bloom, who in a few weeks were carried to an untimely grave from the consequences of a cold contracted by wearing thin shocs in damp weather, or going out into a damp evening air with thin clothes, or coming out of a warm lecture room into a chilly air without a suitable addition to her indoor covering to protect her from the influences of such a change, or from being in a state of warmth and then suddenly checking perspiration by throwing off some outer garment and sitting in a current of air. And many thousands more have had the bloom

driven from their cheeks, and found a sure passage to the consumptive's grave, through similar practices. The neck and arms should never be bare, except for a short time in very warm situations; and no woman of sound sense will go to any party in such dress, no matter how "genteel" it may appear; for such dress is quite sure soon to lay the foundation of a cold, a cough, a bronchitis, a shortness of breath, and probably something still more serious. Thin shocs are unfit to be worn at any time, except in one's own house during warm weather; and no woman or girl should go to a neighbor's, to a church or party, into a cellar, or even upon the flag-stones of her own yard on a cool day, without clothing her feet with shoes and hose thick enough to secure her against all possibility of getting the feet chilly. And if the changes of the weather, or of situation, subject a woman to considerable variations of temperature in one day, she should make those changes in her clothing which will render it impossible for her system to have any check of its most delicate function from these vicissitudes of the atmosphere.

The clothing should also be loose upon every part of the body. Any pressure or tightness exerted upon the frame, will interfere with some function that is necessary to health. If the skirts be numerous, heavy, and tightened about the hips instead of being suspended from the shoulders, the consequences will be accumulation about the pelvis of a heat which will debilitate the organs in this region; a pressure upon (or over) the organs, which will not allow them the room necessary for their full expansion; and the

exercise upon these organs of a downward force that will strongly favor their displacement. Such a habit of wearing the elothes, will greatly add to the liability of the woman's suffering painful menstruation, leucorrhea, and falling of the womb. The action of the stomach and bowels is also restricted by tight elothing; and this helps to establish indigestion and eostiveness.

If the elothing be worn tightly around the chest, the full expansion of the lungs is interfered with; they can not take in the necessary quantity of the air upon which life depends; their debility and congestion result; the blood is imperfectly purified; and then any trifling cold, or latent tendency of the constitution, may hasten the early development of consumption. Many a woman would recover from eolds and acute diseases of the lungs, and many a person liable to hereditary consumption might live to a happy old age, if they had not enfeebled their lungs by tight lacing. As the perfection of the generative organs, and the integrity of the entire system, depend upon a full supply of air to the lungs, it need be no occasion of surprise that the courses are checked, and the entire strength prostrated, when the organs of respiration become affected with chronic disease. And it is not alone the old-fashioned (now becoming a new fashion) tight-lacing with stays, that will injure the lungs by pressure. The closely-hooked or buttoned dress, with its phalanx of whalebones to squeeze in the ribs, and the tightened and boned under-body, are quite as injurious as the eorset, and may be made

even more so than the corset laced loosely. Nor should a woman seek to deceive herself or any one else as to the fit of her clothing, by drawing in the chest and then showing that there is a little room between her body and her dress. The only rule of safety is, to have no article of clothing exert the least pressure upon any part; but to have everything fit evenly, and with that looseness which will not look awkward but yet will allow every organ the fullest room for its largest growth and expansion. There is a wealth of comfort and luxuriance of freedom in this style of dress, which can not be appreciated by those who bind themselves to the slavery of the laces and bones of "fashion."

III.—Exercise (exertion, labor) is one of the necessities of human existence. Fashion may pronounce it vulgar, and the fastidious and the lazy may attempt to get along without it; but to the growing girl, it is an indispensible requisite. Recreation, when in the form of walking, horse-back riding, rowing, and other out-door sports and enjoyments of the same kind, is most valuable exercise. Such recreations should be taken frequently, not occasionally; they should be entered into heartily, and should be mingled with some romping and laughing and boisterous merriment-a recommendation which may be looked upon with alarm by some, but a practice which gives a relish to every pursuit in life, and which has no equal for distributing the nervous action and sending the life-blood with a bound to every fibre of the system. If horses or boats are not at command, a flower or kitchen garden can no doubt be had; and an hour or more spent in trimming it every day, will be priceless to the health.

The light recreations and labors just mentioned, are placed out of doors. This serves the triple purpose of providing exercise, air, and sunshine. The latter two are quite as important as the former; and any young woman who spends nearly all her time in-doors, shut out from the sun and fresh air, can not attain a full and healthy development. The lack of sunshine acts upon human beings precisely as it does upon plants-prevents the purification of the juices, and causes feeble tissues and a faded color. The full and direct rays of the sun are absolutely required to give perfection to vegetables; and so are they to enrich the blood and secure ripeness to human beings. If the girl will adopt the loose dress already mentioned, by which her limbs and chest and abdomen will be free to perform vigorous movements; and then take a considerable portion of her exertions and recreations in the open sunshine, without cultivating any silly fears of a tinge of red-andbrown upon the skin, it will be more valuable to her than any dowery she will ever receive.

In-door labor is not to be forgotten, and should be performed every day—not sewing, embroidery, painting, and similar employments that fatigue the nerves without benefitting the muscles, but the lighter portions of the regular household duties. These give firmness to the bones and muscles; and also cultivate those habits of order and usefulness which are not only of service in a prudential point of view, but soothe and restrain the mind of the

young woman at a time in life when the impulses and imagination need moderating.

No person, and particularly no girl, should live in a house that is dark, gloomy, damp, or incapable of full ventilation. Nor should the young woman's exercise or labor be so severe as ever to fatigue her. Slender and nervous girls are more easily wearied than the ruddy and muscular. Girls inclined to chlorosis, as elsewhere mentioned, are greatly averse to the least exertion, and may have to be fairly compelled to perform some daily labor; while others will have to be restrained lest they should over-do themselves, not realizing when they have properly done enough. It requires much watchfulness and judgment to apportion to each daughter of a family the just amount of labor which will be good for her. Some lively girls, of impulsive character, will play too hard; and may have to be restrained from fatiguing themselves thus.

IV.—Bathing is useful partly to earry away the solid particles in the perspiration, which accumulate upon the surface; but more particularly to keep up a good outward circulation, to prevent inward congestions, to soothe the nervous system, and to secure firmness and elasticity to the skin. General baths, properly managed, will aid very materially in securing all these results; and it is an error to suppose that the only, or even the principal benefit of bathing, is the eleanliness it promotes.

The temperature most proper for the baths of a young woman, is the tepid or lukewarm. The lukewarm bath ranges between the degrees of 75 and

85; the tepid bath rises from 85 to 95. The temperature may be regulated with sufficient accuracy, by having the water a trifle warmer than the hand of a healthy person, for summer use; and several degrees warmer than the hand, yet not feeling at all hot to it, for winter use. Such baths exert a most healthful influence in giving pliancy and plumpness to the skin, and in absorbing, so to speak, the excessive morbid irritability of the system, and leaving behind a sensation of comfort and repose. This bath is the most proper one for nearly every period of life; and while a very few persons may be benefited by the shock of the cold bath, and a few others by the stimulation of the warm bath, the medium temperature is most valuable in warding off disease, "resting" the body after fatigue, and allaying nervous agitations of all kinds at all periods of life. No woman, during the years of puberty, or the months of gestation and suckling, should employ any other than the lukewarm or tepid bath.

The sponge-bath, or the bathing-tub, is the proper form for using water at this period; but the shower-bath is not proper. The bath may be employed once, twice, or even three times a week, in warm weather, according to the amount of nervous irritability; and once every week or second week, in cold weather. Very frequent bathing (as every morning in all weathers) is quite exhaustive to the system; and no young woman should think of following such a practice. From ten to fifteen minutes are enough to remain in a bathing-tub; and five minutes are better than too long a bath. In the latter part of

summer, river or sea-bathing, with swimming, may be taken at intervals, remaining in the water but a short time. No bath should be taken in cold weather except in a room which has been suitably warmed; nor should a bath ever be taken sooner than two hours after a meal, or less than an hour before one, as it will cause such a diversion of blood to the surface as will greatly embarrass digestion. Nor should a bath be used just before or during menstruation. Thorough drying is necessary after any bath; and in winter, this should be done by brisk friction continued till the surface is in a glow -not pressing so hard as to roughen the skin, and using towels that are sufficiently rough without being as harsh as rasps. Very little soap, and that only of the mild kind (as castile, glyccrine, almond, palm, or honey), is all that is necessary.

Baths, by preserving the cleanness, circulation, and elasticity of the skin, aid the other hygienic measures in preserving a good complexion—not a doughy paleness, but the clear ruddiness and freshness which are so beautiful in woman. It is a mistake to suppose that any of the mild soaps will injure the complexion; or that washing the face in whisky, bay rum, etc., will improve it. And it is a serious mistake to suppose that any of the fashionable powders and cosmetics, now so numerous and advertised under such a variety of romantic names, will add to a woman's beauty. Men of sense despise a woman who daubs herself with such things; and every woman sneers at those of her own sex who use them; while such preparations are themselves

nearly always formed of chemical materials which slowly bring on disease of the skin, prevent the action of light upon its blood, and finally ensure a thick, sallow, and lusterless complexion. Some of them may be almost harmless, but they are also useless.

If the skin of the face, neck, and hands, becomes dry and harsh, it will generally improve by rinsing freely with a fresh basin of tepid water, after using moderately of some one of the above mild soaps; and then with a piece of soft cloth, quite free from soap, washing with a mixture of one part of pure cider vinegar and four parts of rose water. Or the skin may be smeared lightly with glycerine, which may be washed off after a few minutes with a cloth wet in tepid water. Another very good preparation for the same purpose, and which may be obtained at a moderate cost from any druggist, is the following: Emulsion of bitter almonds, 4 ounces; borax, 20 grains, mix. After washing and rinsing, moisten a piece of soft cotton or woolen flannel with this mixture, apply it gently to the skin, and in a few minutes wash it off with warm water.

The head also needs bathing, which it should receive from two to four times a month. Tepid water and soap should be used, and the rinsing and drying should be very thorough. This will preserve both the skin and the hair in a healthy state, and prevent the accumulation of dandruff and early baldness. Hair oils, pomades, and all unctuous materials, are bad for both the sealp and the hair; and girls act a very unwise part in using them. A moderate use of

eool water each day, with good combing and lifting up the hair for the full ventilation of it, will give health to the sealp; and then the oil-glands which lie at the root of each hair, will secrete the softening material which nature designs for lubricating it and preserving its glossy softness through life. I can hardly hope to prevail on young women to cease their use of oils whose rancidness is covered by some heavy perfume; but it is a fact that a year of the treatment above suggested, will restore almost the dryest hair to its natural softness; and the wise may make use of this knowledge.

V.—Growing girls should have plenty of sleep, and it should be taken during the hours that nature sets apart for this purpose. The system can not now endure any drain through loss of proper sleep in the proper hours, though an occasional indulgence of the kind may be of not much consequence after the frame has attained its full degree of solidity. The girl who stays up for parties, balls, operas, or novel-reading, till eleven or twelve o'clock at night, and attempts to make up for this lost time by lying abed late the next morning, will eertainly establish nervous disease and may cause her own early decay. Even adult women ean not keep up such practices, without soon injuring their health. A girl should retire early, not later than nine in winter, and half past nine in summer; and it may be an advantage to make even these times earlier by half an hour. She should rise at least by half past five in summer, and by six in winter, if living in a city; and half an hour sooner, if living in the country. If she can not get to sleep at once upon lying down, that should never be taken as a reason for sitting up later, or for allowing a late indulgence next morning. Regular and early morning rising, and a determined effort to stop thinking on going to bed, will soon make sleep desirable in the evening—and girls should have plenty of sleep, for which the first half of the night is most valuable.

No person should ever sleep on feathers. Straw, husks, cotton, and well-cleansed wool, make by far the healthiest beds; and after a few weeks of use, any person will sleep upon them more soundly, and wake up more refreshed. A bed-room should always be large and high, that the lungs may have abundant food for the night; it should also be thoroughly ventilated, night and day, that every breath drawn may be pure, though no draft should ever blow directly across a bed at night; and the room should be so situated that the sun can enter it freely for some hours every day, as nothing can make up for that stagnation and impurity of air which will inevitably mark the bed-room that is shut in from the direct rays of the sun. These rules for sleeping are necessary to health at all periods of life, and are particularly so during the years of puberty. When it is remembered how many hours every person passes in bed, and that during sleep the body is profoundly relaxed and therefore susceptible to every impression and liable to absorb the weakest poison, it will be understood that health calls for beds and bed-rooms which shall present every condition of purity-not for such as are small, dark,

close, hampered, and crowded with cast-off garments, ill-aired bed-clothes, and other sources of foul smells.

VI.—The management of the mind during puberty, will often call for all the energy and tact that the wisest mother can command. All the feelings are now expanding; the emotions are very strong, while the reason is not yet strong enough to guide them; and the mother who will conduct her daughter safely through this crisis and its temptations, and establish in that child's mind the noble feelings and solid principles which naturally belong to it, will have discharged one of the highest duties of which a parent is capable. Such duties can be successfully performed only by the help of thoroughly understanding her daughter's mind-aided by the most constant and unwearying watchfulness, and a daily reliance upon the pure principles of Christianity. It is not the province of this work to enter upon all the details of this important topic, but only to give an outline of that course which should be pursued to establish a good bodily growth and to secure the restraint of the bewildering passions.

Girls should not now be crowded with studies. the duties of the school-room are allowed to become too heavy, the brain and nervous system will be developed at the expense of the digestive, circulatory, and generative organs; in other words, the mind will consume so large a portion of the stock of vitality, that there will not be enough left to supply the necessities of the other portions of the body. A continuance of such a drain, will establish a disturbed action of the entire system; and the girl will grow up delicate, painfully sensitive, and liable to early decay. Most unfortunately, the schools of the present day have their course of study so arranged as to burden girls of this age with too many and too fatiguing studies; and young women are obtaining their education at the expense of their health. A very great modification of the college course, is needed; for too many young women break down under the present regimen, and few of them come out uninjured by such heavy tasking and its necessary confinement.

Study should not be altogether abandoned; but each girl should be put to that amount of it which her mind and frame can receive without ever becoming fatigued. Mental fatigue is worse, and less easily rallied from, than bodily fatigue. The parent must, by observation, learn the amount of mental labor which each daughter ean easily perform (for girls differ very much in this), and allow her that amount, and no more. And if some studies have to be dropped, they should be mostly those that are classed among the accomplishments, as musie, drawing, French, etc. Music, when studied in moderation and the operatic style avoided, is almost a recreation; but the reasoning powers will become strongest, and the emotions be less in danger of growing ungovernable, if the more solid and praetieal branches of education are scleeted. The intensity of action which now marks the girl's mind, enables her to acquire information with great rapidity; hence, if this intensity be not over-wrought, she will

readily lay a foundation in sober knowledge and calm reasoning, which will be an inestimable blessing to her through life. The higher accomplishments may be added to more advantage at a little later period. By necessary moderation in study, idleness and vacuity of mind are not meant; for girls must have regular studies, and a complete (yet calm) occupancy of the mind, else pernicious notions and habits will pretty surely grow up during their indolence.

Allusion has already been made to parties, balls, mixed and free company, novel-reading, etc., as so many stimulants to the inflammable emotions. The present fashions of society make these things appear indispensable; but no prudent mother will expose her daughter to their influence. Such habits warp the girl's mind, fill it with extravagant fancies, and stimulate it to wishes and desires which are not conducive to female purity, modesty, and virtue. excuses will be found and made for all these pastimes; and those who are fond of them, will cry out against the idea of making a young girl a mope, and shutting her up from all pleasure; but there is an abundance of innocent and healthful pleasure to be found, without seeking those kinds which are associated with more or less immodesty, and which suggest impure thoughts that may lead to moral ruin. All who indulge in such pastimes, are by no means unchaste; but the prudent mother will never desire to try the experiment of educating her daughter to the nearest possible point of that moral precipice over which so many daughters have been hurled to destruction.

During this period, the girl's mind is often pecu-

liarly irritable and perverse. It is not willful wickedness, so much as a lack of self-control, which for the time allows each new impulse to obscure the control of reason. It is necessary that the girl be taught that self-command which will enable her at all times to meet the duties and annoyanees of life with equanimity; for in this feeling will be found the greatest safeguard against that fretfulness and misehievous willfulness which may assail her. The mother's own example, aided by her instructions, will best establish this self-control. And the mother will find it necessary to deal with her daughter's waywardness by a prudent mixture of firmness and mildness. Harshness and severity will sour the temper; and will repel that full confidence which is so lovely between mother and daughter, and is so necessary to the control the mother should hold over the child's reason and affections. Firmness does not mean eruelty; and in the guidance of this period, it should always be combined with sympathy, tenderness, and suitable appeals to the reason and to the religious feelings. Woman is apt at such combinations of mind; and by a judicious use of them, the mother will usually conduct her daughter safely through the eapriees of puberty.

Monthly Regimen.—During each monthly period, and for a few days before and after it, the frame is unusually sensitive to impressions. A woman should be extremely eareful, therefore, not to expose herself to the weather, go out thinly elad, sit in a cold room, go about in thin shoes, get the feet wet, or use cold baths, just before or during this time. A little

carelessness then, under the impression that so much care is "squeamishness," is fatal to many, many women every year. The records of medical experience are crowded with such instances; and with thousands of both serious and fatal cases resulting from wearing too thin clothing, (especially on the neek, shoulders, and arms), or not taking sufficient pains to increase the clothing according to the daily changes of the weather, or sitting upon a stone, the damp earth, etc. This is a time when no such risks ean be made with impunity; for although such improper exposures may fortunately have resulted in little inconvenience at other periods of the month, the system is not now in a condition to repel such causes of disease. It is often a difficult task to teach this lesson to a young girl; but its importance demands the unceasing vigilance of the mother.

At these times it is particularly improper to use iced drinks or food; no malt or vinous liquor should be allowed, even under the specious allurement of its being a "medicine;" and coffee and tea should be indulged very sparingly. Of course no chaste woman would allow marital connection at such a time; but neither should it be allowed immediately before, nor too soon after the ending of the flow. As elsewhere advised, a fair degree of manual labor will usually fortify the strength for the menstrual periods, and generally enable the woman to pass them with little trouble. Too much labor during the few days before a monthly change, will hasten its appearance and probably make it too profuse. Profusion can often be relieved by lying down, avoid-

ing exertion and excitement for a little time before the courses are expected, avoiding meats, coffee and stimulants, and using such cooling drinks as barley water, whey, etc. Painful menstruation requires rest; and deficiency can be promoted by rest in a warm bed, warm drinks of balm or pennyroyal, and bathing the feet in warm water and putting hot bricks or irons to them. When medicines become necessary in any of these cases, the appropriate course will be found elsewhere in this book.

Emeties and purgatives are always to be avoided while the courses are on, unless some necessity compels their use; more sleep than usual should be allowed; and a girl's studies should always be moderated for that week. Any light surgical operation, such as drawing the teeth, should be postponed; and journeys should not then be undertaken. Medicines should be suspended during the days that the flow is on, unless some necessity calls for their use. Balls, parties, and public entertainments, are especially to be avoided at this time, even by adult women; for the increased susceptibilities of the body now increase the chances of taking cold by the vicissitudes of the atmosphere, and render the frame more easily prostrated by fatigue and excitement. If any real derangement of the menses occur, no woman should allow it to remain unrelieved; for the function is so necessary to health, that its disturbance is always a just ground for apprehension. Yet an indiscriminate haste in resorting to medicine at each period, is often worse than a little delay in medication: and the woman should first feel satisfied that the disturbance is sufficient to exert a bad influence upon the health, and then learn to consult her medical adviser candidly and without false modesty.

## HASTENING OR RETARDING MENSTRUATION.

From the remarks which have already been made in the section on Precocious Development, it will be seen that the mother is capable of so regulating the daughter's habits of living, as almost at will to hasten or retard the appearance of the menstrual flow. In this country, there are very few instances in which any stimulation need be brought to bear upon this function; for its too carly appearance is nearly the constant error among girls. Occasionally, however, a child will be met with, in whom the frame acquires its growth so slowly as hardly to show any inclination to put on womanhood; and the courses remain unseen, long beyond the natural time. If the health be good, let nature still be waited for without any resort to forcing medication; for the difficulty may be congenital, or nature may present one of her anomalous instances of healthy slowness, and abrupt or strong stimulation would do positive mischief. But if the health fail, and the child become irritable and pale, and show a sort of dwarfishness both in mind and body, restorative measures must be taken at once. Study must be entirely laid aside for a time; the country or sca air must be procured; riding, romping, the lighter kind of gymnastics, and similar exhibitanting recreations, must be allowed, or even enforced; lean, fresh, and rarely-done meats, with oysters, fish, and eggs,

should enter in fair quantities into the diet; a little weak coffee or tea may be allowed occasionally; a dry and sunshiny house, with as much out-door life as possible, should be secured; there should be no over-working of the body, though relaxing idleness be not allowed; and a little cheery company, some lively (but not romantie) reading, and regular but full hours of sleeping, should be added to the other regulations. These measures will generally provide a supply of rich blood, and send it freely to all parts of the body-at the same time giving it that direction toward the uterus which will nearly always secure the desired result in good time. Again I would enjoin much cautiousness in resorting to medicines, even under these circumstances; and on no account to do so, till this course of hygiene has been continued for several weeks. If the case is one in which weakness of the ovaries and womb will not fully give way to hygiene alone, then this course of management may be assisted by the use of such mild medication as will be found in the section on Tardy Menstruation, or that on Chlorosis-according to the condition in which the girl may be.

But it is generally more important to retard the appearance of the menses, and to keep the girl a child as long as this can be done naturally. For this purpose, she should be encouraged to have company younger than herself; never laughed or coaxed or driven out of her girlish plays; and not called a woman and taken into society, and encouraged to become as forward as if she were a woman while yet but a child. The diet should be plain and solid, and even

a trifle eoarse; though some of these girls are likely to be so delieate in taste and appetite, that they seem unable to abide any food but the daintiest. But dainties are most positively hurtful to them; and they should be given a hard bed, early retiring and rising, loose elothing, and some in-door work with an abundance of out-door and hard rompingall which will soon bring an appetite that will relish potatoes and eorn bread, and do perfectly well without pies, cakes, iced-cream, coffee, nuts, and other stimulating "relishes." Sunshine, air, dryness, full elothing, and work to the point of moderate fatigue each day, will seeure that solid bony and muscular development which will make the nerves and uterus wait for the rest of the system, and then lay a foundation for their natural growth and the healthy eontinuance of their duties to a good old age. Labor must be insisted upon; and while exhaustion is to be avoided, the point of gentle fatigue at actual muscular work must be reached each day. This, with suitable diet as already mentioned, will prove the best means for restraining a dangerous excitation of the passions, as well as giving firmness to the constitution.

## CHAPTER V.

DISEASES OF THE ORGANS AND THEIR FUNC-TIONS.

DISEASES OF THE EXTERNAL GENITALS.

Inflammation .- The large and small labia, and the mueous membrane upon all the external genitals, are liable to inflammation at any period of life. parts become dark-red, hot, dry, very tender, and much swollen; after a little time, a thin white or yellowish discharge takes place; the passage of urine causes more or less severe sealding from the first; walking increases the suffering by rubbing the tender surfaces against each other; and the discharge may presently become so aerid, as to excoriate the skin around the genitals. Very fat and serofulous children are liable to it; and sometimes, by neglect, the surfaces grow together during the inflammation. Women may have this difficulty follow rash or too frequent intercourse; and from lack of timely cleanliness in a degenerate leucorrhea, or after the menses. Women suffer very severely when attacked by this difficulty. It is best treated by rest, especially by lying down; by a rather free movement of the bowels with senna, or leptandrin, or the liver pills; by washing the parts in lukewarm water every four or six hours; and drinking freely of a tea of cleavers, spearmint, or water-melon seed. If the case prove obstinate, a fomentation should be

made of elm-powder, sprinkled thickly with lobelia, and applied quite soft and lukewarm. It may be changed, and the parts washed with cool lobelia infusion and lightly smeared with sweet oil or goose grease, every six hours. An injection of an even teaspoonful of elm-powder, and one-fourth of a teaspoonful each of boneset and lobelia, in half a cup of tepid water, may be thrown into the bowel of an adult once in six or eight hours, and retained. The liver pills should then be used to secure two movements of the bowels each day; and the diet made plain and light. If the patient seem feverish, she should drink a tea of two parts white root, and one part each spearmint and ginger-using half a cupful of it, warm, once an hour. The diaphoretic mixture, one part, and water-melon seeds half a part, will make a suitable drink. A few days will usually terminate the difficulty; but a married woman should be particularly careful of herself for some weeks afterward. If the child's parts have a tendency to adhere, a piece of oiled silk or linen should be inserted between them. Some children seem very feeble after a protracted difficulty of this kind, and may need some tonic, as the yellow-poplar, camomile, or wine of comfrey.

Abscess.—When inflammation, as above described, is seated deeply and is not soon dissipated, congestion and abscess of the labia may follow. Besides the preceding symptoms of inflammation, the pain and swelling are usually extended down the thighs and to other surrounding parts; there will be tenderness in the groin, and probably glandular swellings, or "kern-

els" may be felt there; and finally the pain in the genitals becomes of a throbbing character. The abscess which then follows, may be of varying size, and near the surface, or deeply seated. Its discharge is hastened by the use of the elm and lobelia poultice; and the patient must pursue the same general course above directed for a case of severe inflammation. Tonic treatment should be used, as soon as the abscess discharges; as thereby the patient may avoid a succession of such gatherings. It is generally best to leave these abscesses to open by themselves; but if the suffering is very severe, and the abscess is near the surface, a narrow lancet may be used.

Carbuncle.—This is a rare affection. It commences with light erysipclas, and puffiness of the labia, with little pain; and these symptoms are soon followed by considerable swelling, heat, tension, and very great pain. The parts look dark-red and glassy; the pain presently abates; a purplish spot appears, and soon becomes brownish or lead-colored; and upon this the gangrenous carbuncle commences. It may spread quite rapidly over the whole of one side; but is generally small. It is a dangerous malady. It may be combatted, while yet an erysipelas, by poultices of wild-indigo leaves with elm, or some lobelia or camomile flowers added to these; and internally by a full dose of leptandrin or the liver pills every twenty-four hours; and sweating with the diaphoretic mixture, or with two parts white root and one part ginger, or with equal parts of pennyroyal and camomile or feverfew flowers. If the suffering increase, and the system become much agitated or feverish, an emetic (with composition tea) must be given immediately; and may have to be repeated once a day for a few days. It is a most powerful means of cutting off the tendency to gangrene. Continue the sweating drinks between the emetics. If the purple spot of carbuncle appear, poultice with wild-indigo leaves and dogwood bark in elm-mixing the poultice with yeast, so soon as any foul moisture or ulceration is noticed. The poultices should be changed every three hours, and at each change the parts should be well (yet gently) cleansed with suds of castile soap; and the diseased portion afterward wet with number six, diluted as may be found necessary. Should the gangrene be disposed to extend, the parts should be covered with a powder of ten parts gum-myrrh and one part redpepper, and the poultice applied over this. The patient's strength should be sustained by the spiced bitters, and by a small drink of composition tea every hour or two. These sores are often very slow in healing; and require dressings of simple cerate or beeswax plaster, after the mortified part clears away. Convalescence should be advanced by spiced bitters, or by the following tonic and alterative preparation: Yellow-dock, golden-seal, and yellow-poplar bark, each four ounces; wahoo, one ounce. Pour on two quarts of hot water, keep hot (but not boiling) for two hours, strain and press off, and add a pint of maderia wine and two pounds of sugar. Dose, a tablespoonful three times a day.

Dropsy .- Dropsy of the labia may occur at any

period of life, but is most common during pregnancy. The swelling is large, soft, and pits upon pressure; there is no pain, but a sense of fullness, and perhaps a little tenderness; the color is pale, and the appearance glossy and rather transparent. The treatment proper for it will be found in the section on dropsy during pregnancy.

Injuries.—When the labia are injured by blows, violence during labor, forcible attempts at intercourse, etc., the parts become greatly swollen and puffy, dark-red, hot, tender, and often very painful. Even moderate injuries are likely to be followed by suppuration; hence the parts turn very dark, the pain becomes throbbing, and the patient has chilliness before the suppuration commences. The treatment should be similar to that for abscess of the labia.

Itching.—Itching, or pruritus, is a most annoying malady, to which women are subject at all periods of life. It consists of an uneasy tingling and itching sensation in the external parts; and increases after eating and exercise, and upon going to bcd. It often becomes painfully intense—keeping the woman in misery during the day, and awake and in torment during the night. The desire to scratch is almost agonizing; and the woman feels as if she could tcar herself to pieces, and is scarcely able to control herself in company. Yet scratching affords no relief, but rather provokes still more suffering. The parts themselves become hot, dry, sensitive, swollen, and sometimes dotted with a few very small vesicles containing a drop of acrid fluid. The trouble sometimes

returns periodically. It may be caused by uncleanness, acrid leucorrheal discharges, the discharge from excoriations about the mouth of the womb. chronic inflammation of the bladder, small worms in the rectum, and an impure state of the woman's blood. A cause so common as to deserve a separate mention, is excessive marital indulgence. The treatment of the difficulty often proves very unsatisfactory, on account of using only local appliances and neglecting to remove the original cause of irritation. This cause must be carefully searched for, and then vigorously removed by appropriate measures. It is not uncommon to find it consist in bilious derangement and an acid condition of the stomach and bowels; and no relief can then be obtained till these conditions have been removed by the liver pills, and female tonic or spiced bitters, and perhaps even by some emetics. But let the primary cause of difficulty be what it may, it must be removed; and a severe case of pruritus becomes so really terrible to a woman, that the measures must always be applied very vigorously. Having attended to this, local applications are then useful. Cold water agrees with most, and lukewarm water with some. A wash of golden-seal and beth-root in equal parts, or of lobelia and yellow-poplar, or of black-cohosh and raspberry, may be used freely, both as a simple wash and as injection. Equal parts of bugle-weed and wildindigo, with a small portion of borax, is a good wash. Borax seems very useful when used alone, or added to any of the above decoctions. The use of the nervine injection two or three times a day, and a tepid sponge-bath, or a tepid hip-bath, will be valuable aids in securing relief. If the patient is very nervous and irritable, these latter measures must not be neglected; and the assafætida pills, or a tea of the antispasmodic mixture, must be added. Of course marital pleasures will be abstained from.

Nymphomania.—This term is applied to a condition of slight inflammation and extreme sensitiveness of all the external soft parts, developing the strongest sexual desires, and even going so far as sometimes to allow passion to overcome reason and decency. It is usually accompanied by nervousness, and a species of nervous feverishness, quick breathing, palpitation, a thin and offensive discharge, and lascivious looks and conduct. In extreme cases, it fairly becomes a species of insanity. It may be produced by the causes of pruritus, even in married women; and in addition, girls may excite it by masturbation. The treatment should consist in cold water to the genitals, purgation by leptandrin, injections of elm and lobelia two or three times a day to the bowels, a very light diet, and a lobelia pill every third hour, (or oftener, if there is much excitement). Cold applications should be made to the head; a tea of cleavers and mallows (or water-melon seeds) may be drunk freely; a tepid bath given at least every second day; only a hard bed allowed; all mixed company and novel-reading strictly avoided; and daily labor provided, for the relief of both mind and body. Wine, beer, and coffee, are injurious; and a system of "scolding" will do mischief, whereas mild moral influences do great good.

Closure of the Labia. - It has already been remarked, in speaking of inflammation of these parts, that the labia sometimes become adherent, or "grow together." The same condition is sometimes found on birth. The cohesion may extend the full length of the labia, or may be but partial. When partial, it will in after life interfere with sexual congress, and also with child-birth. When complete, it prevents the escape of the urine, and would soon cause the death of the child. When cohesion results from inflammation, the parts may (for many months afterward) be separated readily by a large blunt probe. Complete cohesion at birth, demands immediate separation by the use of the knife. Partial cohesion may be left untouched till puberty, but should always be overcome before marriage. The operation is a simple one, not dangerous, and accompanied by little pain. Its performance is of course always left to the surgeon.

Imperforate Hymen.—In describing the organism of these parts, it was remarked that the hymen might sometimes be wanting, and that its presence was not an infallible test of virginity; but that at other times it was unusually large and thick. The latter condition may prevent marital connection; and in a few very rare cases, the hymen has so completely closed the mouth of the vagina as to prevent the escape of the menses, and thus seriously injure the health. Such unusual developments of this part, demand its severance; and this little operation should not be delayed in the hope that the accumulation of the menses will yet force an opening, nor

must the young husband be so rash as to undertake violently to break down this membrane when he finds it very dense. A few simple touches of the surgeon's knife, and a few days' rest, will overcome the obstruction; and the operation will scarcely cause a pain. Modesty may lead a woman to hesitate; but she should reflect that the physician who is fit to be employed at all, is a man of pure mind, who has studied his profession for the direct purpose of rendering assistance under all manner of delicate circumstances; and that hesitation should not complicate the circumstances, when any kind of an operation becomes absolutely necessary.

The labia, on rare occasions, suffer from enlarged veins, warty growths, encysted tumors, and oozing tumors. Hernia, or protrusion of the bowel (rupture) into the labia, sometimes occurs, and the bladder sometimes descends in the same manner. A membrane may also close the water passage, and prevent the escape of urine-either at birth, or from disease at any time of life. The extremity of the water passage is sometimes the scat of a small tumor-which causes intense irritability, very frequent inclination to pass water, bearing down, scalding of urine, and great pain in urinating, walking, etc. All these cases are proper objects for the best care of the surgeon, whose professional skill becomes valuable by enabling him to distinguish rupture and enlarged veins from all manner of tumors, warts, and similar growths about these parts-for the consequences of using the knife in the first two classes, would be serious in the extreme; whereas all classes

of unnatural growths demand a simple and harmless operation for their removal.

## TARDY OR RETAINED MENSTRUATION.

When a young woman arrives at the usual age of puberty, and her menses do not appear, they are said to be *retained* or *tardy*. There are four general classes of such cases:

I. Insufficient Development.—In these cases, the girl has not the plump form, enlarged breasts, improved voice, and other signs of womanhood, as previously detailed. The uterus and its appendages are either misformed or imperfectly developed; hence the menses do not appear, though the girl is otherwise in good health. Nothing could be more absurd than to attempt any forcing medication with such a person. Disease has often been provoked, and constitutions ruined, by the use of strong agents to compel the appearance of the monthly flow, as was fully explained in the last chapter. Let the young woman alone; give her a generous diet, cheerful company, light labor, very little study, and regular habits; and when her frame has had time fully to develope itself, the menses will show signs of appearing. Should it so happen that no signs of them are ever seen, it is cause for regret as a case of malformation; but while the health remains good, special medication for the monthlies would be foolishness, and a decided wrong to the unfortunate woman.

II. Development, but inactivity.—In this class, the usual changes of puberty have partially taken place,

but the development is not complete. The menses not appearing, the girl soon begins to show signs of poor health, such as languor, paleness, headache, ringing in the ears, poor or perverted appetite, palpitation, and flushes of transient excitement. may be lencorrhea; or the case may sink into aetual elilorosis. Such persons are usually of the lymphatic temperament; and nearly always may their eheeked development be traced to some such eauses as the following: Damp or dark habitations, elose air, bad or insufficient food, lack of exercise, exhaustive labor, mental depressions, and disappoint-This class is the most numerous in cities, where poor laboring girls suffer from in-door life, a elose atmosphere, poor food, and sad hearts; and where the daughters of the rich spend too much time in idleness and darkened rooms. In treatment, the principle aim should be to invigorate the constitution, but be sparing in the use of medicines. Cheerful society, light and well-ventilated rooms, out-door recreations, moderate labor, no study, a little lively reading, and plain food (partly animal), are the chief measures to be employed. A short tepid bath twice a week (or once a week in cold weather), followed by brisk friction; early hours of retiring and rising; dry feet, and earefully-regulated elothting, must be strictly attended to. By perseverance in this course for a few months, the invigorated frame will usually establish the menses quietly and naturally, without any medication. But should the health fail, and the stomach be persistently foul and weak, a stimulating emetic should by all means be

given once in five or eight days; and the spiced bitters, or emmenagogue tonie, used between them. There is nothing that will so effectually regulate these stomachs as searching and stimulating emetics. Costiveness may be relieved by a grain each of leptandrin and capsicum at night, or night and morning; and an injection of ginger in elm or starch water in the morning. Coldness of the surface may be met by a wash of red-pepper, or mustard, along the entire spine and on the extremities, night and morning. A good tonic may be made by macerating an ounce each of camomile, motherwort, and yellowpoplar (or tulip), and one-fourth of an ounce of prickly-ash bark, in two quarts of malaga or elderberry wine. Give of this a large tablespoonful three times a day. These medicines are to be used only in bad cases, and when the hygienic measures are seen to be insufficient. The remedies now advised, will searcely ever fail; and direct emmenagogue agents should not be used, till periodical achings through the pelvis and along the thighs show that nature is trying to establish the menses, but does not sueeeed. Then one ounce of black-cohush may be added to the above tonie; and a few days before the anticipated return of the pains, the patient may take a tepid hip-bath each night-using a drink of pennyroyal rather freely at the time. Perseverance is necessary, but erowding haste is very bad. Ergot, iron, "female pills," aloes, and strong purgatives, are never safe nor allowable.

III. Constitutional Disease Interfering.—The existence of pulmonary consumption, dropsy, elmonic dis-

ease of the liver, spleen, etc., may prevent development of the uterine organs. Of course no treatment ean beavailing, except as it removes the constitutional malady; and foreing medicines must not be thought of for a moment. These facts are as important when any chronic affection has suppressed the menses in a developed woman, as when it has retarded the flow in an undeveloped girl.

IV. Development good, but the girl too plethoric .-This class is not numerous. The girl is plump, robust, hearty, and ruddy; but the monthly effort amounts only to giddiness, a sense of fulness in the pelvis, and pain in the back and loins. Such patients, in treatment, require some daily and pretty vigorous labor, out-door exertion, dry feet, and a largely vegetable diet, with a tepid bath three or four times a week, just before the recurrence of the periodical pains. A tepid hip-bath, and warm footbath, should be used each night, for three nights before these periods; and a warm tea of pennyroyal, summer savory, thyme, or eamomile, drunk freely at the same time. Equal parts of black-cohush, bluecohush, camomile, and angelica seeds, made into an infusion by adding half a pint of hot water to a heaped tablespoonful of the mixture, will be the most appropriate emmenagogue. Two tablespoonsful of the liquid may be taken three times a day. Oceasionally, a patient of this class becomes deranged in digestion, and requires a moderately relaxing emetic. If eostive, she should take a grain of leptandrin night and morning; or a sufficient number

of pills of leptandrin, in extract of boneset, to move the bowels fully.

An imperforate hymen may prevent the escape of the monthly hemorrhage. This should be investigated; and steps taken to remedy it, if it exist.

## PROFUSE MENSTRUATION.

Profuse or excessive menstruation, also called menorrhagia, eonsists of an inordinate menstrual This flow may occur at the regular catamenial periods, be much greater than is natural to that particular woman, and cease in duc time; or it may oeeur regularly, not appear to be profuse, yet become excessive by continuing several days, or even weeks, beyond the natural time-one menstrual term almost running on to the next one. Or it may occur every three weeks, every two weeks, or at even shorter intervals. When a menstrual flow takes place during pregnancy, or suckling, it is called a menorrhagia; but an irregular sanious discharge before puberty, or after the turn of life, is considered as a hemorrhage. An excessive menorrhagia in married women, who have been weakened by repeated ehild-bearing, or by misearriages, may be accompanied with clots of true blood, as in actual hemorrhage; hence the treatment of the two maladies requires no practical distinctions.

Causes.—Some women are predisposed to profuse menstruation from impoverished blood arising from serofula, kidney diseases, ehronic disease of the liver, poor and indigestible food, prolonged suckling, damp and unhealthy location, etc. Among the direct

provoking causes may be mentioned colds, strong stimulants, active purges, ovarian irritation, and excrtion too soon after delivery or miscarriage. The latter is a frequent cause, and gives rise to a most troublesome class of cases; while free amorous indulgence is probably the most common of all causes, among married women, and often is so continued as to make a cure impossible. Persons advanced in years, who have led indolent and irregular lives, practiced tight-lacing, kept late hours, and used rich food and stimulating drinks, may bring on a softening of the uterine tissues, and suffer most prostrating menorrhagia.

Symptoms.—A free catamenial flow, not at all disturbing the health, is not menorrhagia. A true case of excessive menstruation soon produces languor, sense of exhaustion, paleness and sallowness of the countenance, weakness across the loins and hips, headache and giddiness. A continuance of the malady aggravates all these symptoms. The headache, and pains in the back and loins, become very distressing and persistent; there will be pains in the abdomen; the pulse will become quick and feeble; and the patient gets very sallow, thin, hollow-eyed, melancholy, and nervous. The languor also increases; severe leuchorrhea is common between the menstrual periods; the stomach and bowels become much deranged; and eventually there may be dropsy, chronic diarrhea, great emaciation and even epilepsy. This is the common course of the symptoms from ordinary menorrhagia; but a sudden and profuse loss of blood may reduce the patient so rapidly as to prostrate the pulse, cause fainting, make the extremities and cheeks cold, and directly jeopardize life. In elderly and weakly persons, and in those who have suffered several miscarriages, the mouth of the womb usually becomes swollen, and falls downward and backward, while the body of the womb falls over upon the neck of the bladder—causing difficulty in discharging urine, and making a most unpleasant aching sensation in the water-passage. Such women are also most liable to profuse leucorrhea before and after the menstrual discharge; and also to a relapse of the discharge itself.

Treatment.—The womb must be thoroughly strengthened and stimulated, and the blood strongly determined away from it, before any relief can be obtained. All cold applications only drive the blood more and more upon this organ; and we know that a cold and wet surface is one of the great provoking causes of menorrhagia in weakly women. No matter, therefore, how highly any may recommend cold cloths, cold water, ice, and similar appliances to the abdomen, vagina, etc., let them be at once and forever ignored by all reasoning people. The course elsewhere laid down to arrest the hemorrhage of a threatening abortion, is the only proper one to follow during the flow of a case of menorrhagia; and this must be pursued very vigorously, in severe cases. The diffusive drops, in a tea of beth-root and bayberry, (or sumach bark), or this tea alone-with a recumbent position, hot irons to the feet, and a stimulating wash upon the abdomen and extremities -will meet all the light, and even most of the severe

cases. But in very prostrating cases, composition tea, with a teaspoonful of diffusive drops to each dose, will be none too strong; or a strong tea of any astringent (like hemlock bark, oak bark, sumach leaves, etc.) with as much red-pepper as can be endured, may be required. Any severe loss of blood speedily blunts the feelings; and a stimulating tea which would be too sharp for a well person, would scarcely be tasted by a woman who was cold, blue, and fainting, from sudden and excessive menorrhagia, or any other hemorrhage. At the same time, the very strongest stimulants must be applied hot to the entire abdomen and extremities; and a strong decoction of oak, hemlock, sumach, or other astringent, with a tablespoonful of number six to the pint, should be thrown freely into the vagina with a female syringe. Some cases seem hopeless, without such a vaginal injection every thirty minutes, or so; and some cases are intractable, till an even teaspoonful of composition powder, or some similar astringent and stimulant, is mixed with three or four ounces of thin starch water, and thrown into the bowel once an hour, and retained there.

If the flowing checks, but still persists beyond the ordinary time or quantity, one or more stimulating emetics must be used; and the emetic may be followed by a cold tea of three parts composition and one part yarrow—from one-fourth to one-third of a cupful every three or four hours. Let the bowels also be kept fairly regular by the liver pills; or by suitable doses of leptandrin and cayenne in equal parts.

While these measures will fully remedy the present attack, they may not be at all sufficient to eure the malady; and if the woman take nothing between the menstrual periods, the excessive flow will return. An intermediate treatment, therefore, must be carried on with regularity, and with some perseverance; as by it, these cases will finally be restored, while without it (or under the course of cupping, blisters, clixir vitriol, lead injections, ice, opium, ergot, etc., of allopathic physicians), the woman has no prospect but a series of these monthly exhaustions, till relieved by the grave.

A child that has suckled nine months or upward, must be weaned. Marital intercourse must positively be forgone; and even after recovery, must be renewed only with the greatest moderation. The female restorative may then be used regularly; or the woman's friend will be found quite as available, particularly for patients not over nervous and those inclined to coldness of the surface. Beth-root and black-haw bark are good astringents to combine with tonics; and yarrow is peculiarly good, when the patient is bilious and languid. The unicorn root, in moderate quantities, is one of the most suitable tonics. A very fine preparation may be formed as follows: Dogwood bark, comfrey, yarrow, root of common nettles, each two ounces; carpenter's square, four ounces; ginger and black root, each one ounce. Infused in two quarts of wine with two pounds of sugar. Dose, a large tablespoonful three times a day. If the patient is nervous, an ounce of lady-slipper may be added to the mixture.

While using the tonie, a plain yet generous diet must be allowed; daily but only moderate labor taken; fresh air and sunshine duly and regularly enjoyed; and eheerful company secured to the nervous and melancholic. A tepid sponge-bath and friction must be taken at least twice a week in warm weather, and once a week in cold; and coolness of the surface must be met night and morning by a strong wash of cayenne, mustard, or smart-weed, along the entire spine, over the pelvis, and upon the lower extremities. Purging is to be avoided, yet no degree of costiveness is to be allowed; and if the movements of the bowels are not sufficiently free and natural, the liver pills should be used as needed.

All these things may be done, and yet the patient may remain languid, sallow, and nervous, with headache, bad breath, and weakness or pain in the back. These mark a torpid and diseased liver; and as this may have been the predisposing eause of the original menorrhagia, so it may now reproduce it at each menstrual period. While still regularly pursuing the above measures, there must now be added to them a proper series of stimulating emeties. There is nothing equal to them; and all other means and measures may fail, till these are used. The emetic should be the stimulating one-given with eomposition tea and lobelia seeds, used in a searching manner. No woman ean possibly be too weak to take them; but the most athletic may sink into incurable disease without them. One emetic is not often of much consequence, but it should be repeated

once a week, or twice a week, till the sallowness begins to break away, the breath to get sweeter, and the appetite to improve. In old and bad eases, this may have to be kept up several weeks, with the tonics, etc., between each emetic; in very bad eases, an emetic once in two days, for several times, may be the only measure that will break up the predisposition and allow other remedies to produce their effects; but the majority of even bad eases, will probably need but very few emeties. It will require a good degree of firmness sometimes, to earry out this part of the treatment properly; but in so weakening and baffling a malady, firmness must be exercised, or else all prospect of ever enjoying good health must be yielded.

When the skin remains too eool, and at the same time seems thick and insensitive, a moderate vaporbath should be given the day after the emetie; and the bath should be accompanied by the use of warm composition tea, and followed by a general wash with eavenne or some similar stimulant, and by thorough friction. This measure is an actual luxury, besides being one of the most powerful of all means for breaking up uterine and all other inward eongestions. In the conditions above named, no spongebath can possibly answer the purpose of the vaporbath. Very thin and languid women require only a very light and short use of the vapor. As the general health improves, and vigor and color are being restored, it will still be a good plan, so long as any biliousness or nervousness remains, for these patients to take an emetic about four days before each expected eatamenial return; and use the vapor-bath and stimulating wash the day after the emetic. These means, aided by the tonic and good hygiene, will not fail to put an end to the menorrhagia, and to impart vigor to the entire frame, in a moderate space of time.

### PAINFUL MENSTRUATION.

Painful or difficult menstruation, ealled dysmenorrhea, is one of the most common affections of women. It may be suffered at any period, from puberty to the close of the menstrual flow; and some females scarcely pass a mouthly period free from it. Pains in the pelvis, back and thighs, occurring at or a little before the menstrual flow, characterize the malady. The flow itself may be too free; but is oftenest a little seanty, and many times marked with elots of blood-whereas the natural menses never clot. The difficulty is usually eaused by cold taken at a monthly period; and many reekless young women, who willfully expose themselves to sudden changes while their flow is on, pay the penalty of their rashness by a life long dysmenorrhea. Cold taken soon after delivery or misearriage, rheumatism of the uterus, a constitutional tendency to neuralgia, ulceration of the neek of the womb, undue marital enjoyments, and strong mental excitements, (the latter two provoking great uterine sensibility), are also among its eommon causes.

Symptoms.—The degree and continuance of the pain, are subject to wide variations. In some, the suffering lasts but a few hours and merely causes the

woman to "feel bad," and to sit or lie down. In others, the suffering comes on suddenly and violently, and seems almost insupportable for six or twelve hours. Some women almost faint under the pain, and an accompanying nervous prostration or shock; and others complain of symptoms of strong spasmodie suffering, very much like the pangs of labor. It is in the latter class that small clots of blood are generally discharged, from time to time; and there is an interval of comparative ease between the expulsion of each elot. One class of patients, of a nervous temperament, exhibits neuralgic signs, such as pain in the head, or one side of the head; hysteria; and subsequent achings of the teeth, face, etc. These neuralgic symptoms vary in intensity, occur with or between the paroxysms of pain in the pelvis; and are generally found in women who suffer during coition. Great tenderness of the abdomen is also present, at times; and the entire frame seems torn with agitation and misery, for a number of hours. Another class, of a plethoric tendency, presents febrile or inflammatory symptoms, along with the pelvie pains. They suffer a flushed face, hot skin, chilliness, large and bounding pulse, heat and swelling and tenderness of the vagina, and even a temporary delirium. These eases generally are troubled with uterine ulceration, prolapsus, etc. Discharges of membranous shreds may occur in both classes. Among the irregular symptoms are, swelling and tenderness of the breasts, nausea, and vomiting. The symptoms may begin from one hour to a day or more, before the discharge appears. When the flow sets in, all the symptoms are mitigated, and soon cease. Impregnation rarely takes place in women much afflicted with dysmenorrhea; and is thought impossible in those where the discharge is either clotted, or marked by membranous shreds.

Some cases of dysmenorrhea are owing to a mechanical closure of the neck of the womb; and the menses escape with difficulty, or may even accumulate in the womb—to the serious annoyance and per-

haps scandal of the woman.

Treatment.—About the fourth evening before the expected menstrual period, a dose of the liver pills should be taken; and repeated each evening, till the flow sets in-not purging violently, but moving the bowels about twice each day. On the approach of pain, or even before, use the diffusive drops-half a teaspoonful every two hours in a few tablespoonsful of warm water, or blue-cohush tea, or a tea of feverfew, angelica, camomile, pennyroyal, or dogfennel blossoms. In addition, the warm tea may be taken in free doses every half hour, as the pain increases. A tea of smart-weed is commended by some; and so is a warm infusion of the common cockle-bur. A tepid hip-bath, morning and evening, may be used for a couple of days prior to the attack. When the suffering is severe, the diffusive drops may be repeated once an hour, in addition to the free use of the teas; an injection to the bowel of half a teaspoonful each of powdered scullcap and lady-slipper, in thin starch water, and retained, will be found valuable; and the patient should lie down, have a hot iron put to the

feet, and be covered suitably warm. If neuralgic symptoms are strong, the above injection may be repeated every two hours; equal parts of blackcohush, blue-cohush, and feverfew, will make a very suitable tea; and one or more compound lobelia pills may be given every hour. Even if there is much nausea, one such pill will usually relieve it. If febrile symtoms set in strongly, diffusive drops, smart-weed, and dog-fennel, are not suitable; but a tea of feverfew, angelica, and camomile, will be very good; one-fourth part lobelia herb may be added to the injection, and the injection repeated as desired; and a single pill of lobelia seed in boneset extract given once in two hours. Hot fomentations of tansy or wormwood over the pelvis, are excellent. Due perseverence will soon relieve the pains and promote the menstrual flow. Should the flow then become immoderate, composition tea may be used; or the directions for Excessive Menstruation may be followed.

While the above measures will rarely fail in cutting short an attack, or even in passing it by as a light thing, they will not cure an old and obdurate case. Healthy young girls, but recently afflicted, may soon get cured; but married women, scrofulous and very nervous females, those who have had dysmenorrhea for years, and those who have severe uterine disease, may prove very difficult to manage. Any uterine disease present, must be treated fittingly; and in all cases, good use should be made of the menstrual intervals to relieve the frame from nervous and spasmodic sensibilities. To this end, the

female tonic may be used regularly, and is one of the best preparations of its class. The wine of comfrey is also valuable; and so is the mother's cordial. Headache, sallowness, costiveness, yellow tongue, and other signs of biliousness, must be met by the occasional use of the liver pill; or of black root in powder or infusion. A tepid bath and vigorous friction once or twice a week, must not be omitted; excercise and out-door habits must be attended to; damp feet and tight clothing must be avoided; and all classes, the nervous especially, must be extremely temperate of the marital embrace. Several months of such a course, may be required to effect a cure in any case; and in these chronic cases, where complicated disease may be the cause of the dysmenorrhea, it will be most proper for the lady at once to consult her medical adviser, and place herself under his directions.

## SUPPRESSED MENSTRUATION.

Suppressed menstruation, or amenorrhea, signifies the cessation of the monthly flow from some other cause than either pregnancy or the turn of life. If it occur suddenly, the case is termed acute; if slowly, it is called *chronic*.

I. Acute cases.—These usually result from cold—especially from exposures to damp air, wet feet or garments, cold baths, sitting on a stone or the cold ground, and similar influences, while the menses are on, or when they are about to come on. Chilling the feet by needless exposures to cold water, a cellar, and wearing thin shoes in bad weather, is the

commonest of all eauses; and one which young women often practice against knowledge, and with a reckless disregard of consequences. Very cold drinks, the use of iced substances, and great mental agitations, may act as causes. Any of these influences may act between the menstrual periods, as well as during it; but eases provoked during the monthly interims, seldom lead to such severe symptoms as those in which the discharge is checked while flowing.

Symptoms.—These are usually feverishness; pain, heat, and weight in the lower back, pelvis, and thighs; headache, and dizziness, with swelling of the abdomen and breasts. Inflammation of the womb, or the bowels, or the lungs, may follow. Nausea and vomiting are common; also palpitation, and great lassitude. Sometimes there is severe neuralgia of the uterus; again, the most alarming form of hysteria; and in extreme eases (where the patient was sensitive and the suppression violent), there have been loss of voice, impairment of sight, and partial paralysis and apoplexy. At times, blood is vomited; and the ease is then ealled vicarious menstruation. This relieves the patient, for the time; but does not restore the uterus to health, nor leave the woman strong. A profuse leueorrhea occasionally affords relief, and is more favorable than bloody vomiting. Sometimes girls have the menses ehecked, without any bad symptoms following; as was mentioned in the chapter on puberty.

Treatment.—The congestions (upon which the suppression and its evil consequences depend) must

be broken up as soon as possible, and the menstrual flow also promoted. A warm foot-bath should be given at onee; the lady put to bed, with a hot iron or brick, wrapped in a damp cloth, at the feet; and a tea of pennyroyal given freely, at intervals of half an hour, till sweating is induced. Thyme or summer savory may also be used; and the garden feverfew, or the root or seeds of garden angeliea, make valuable drinks. The diffusive drops, given every twenty or thirty minutes in four or six tablespoonsful of any of the above teas, will be excellent treatment. In very severe eases, a hip vapor-bath may be used; or the patient may sit for ten or more minutes over a vessel from which arises the steam of tansy or hemlock leaves, and repeat every two or three hours; and a tea of hemlock leaves, smartweed, and eamomile, may be drunk freely every half hour. At the same time, flannels wrung out of hot water, and renewed as they cool, may be placed over the lower part of the abdomen; or a fomentation of tansy and smart-weed may be used instead of the hot water; and an injection of ginger and lady-slipper, half a teaspoon of each, given to unload the bowels. A few hours of such treatment, will serve to break up the most severe distress, and its moderate continuance will not fail to restore the menses, unless they are suppressed from aetual (though perhaps unsuspected) conception. After the attack, the bowels should be gently moved with any mild physie; and the patient, if not doing perfectly well, should use the female tonic, or the compound wine of comfrey, till the next menstrual

period has passed by properly. Those cases in which the menses disappear from changes of locality, etc., and are not followed by the severe symptoms here mentioned, require little or no treatment.

II. Chronic cases.—If an acute case have not recovered properly, the uterus may fall into chronic feebleness and inaction. A gradual failure of the general health, may also lead to chronic suppression; and so may severe disease of the uterus and ovaries, such as inflammation, hardening, hydatids, malpositions, etc. The menses may also cease during pulmonary consumption, dropsy, heart disease, severe scrofulous disease of the bones, inflammation of the brain, spine, stomach, lungs, liver, etc.

Symptoms.—The general health fails gradually but surely. The face becomes pale and looks languid; the eyes are dull, with a dark arcola under them; the head aches; there is frequent pain in the back, sides and limbs; and the appetite and strength fail. Three or four periods may pass by, before these symptoms become marked; and then the body and mind both suffer-the woman becoming melancholy, impatient, sensitive, and even morose, as well as pale, thin, wan, and weak. Sometimes actual pregnancy may exist, and the case be thought one of chronic suppression; and again a case of suppression may resemble pregnancy by presenting enlarged breasts and abdomen, and occasionally nausea. Much care is at times necessary to distinguish these conditions, lest a wrong decision should lead to a very improper practice. The judicious physician alone can decide an intricate case.

Treatment.—When severe disease at some vital organ brings about suppression, all the skill of the most careful physician will be needed to manage the case. The graver malady must be corrected, before the menses can be restored. If deep disease of the aterus or its appendages, is the cause, this must first be relieved, and afterward attention given to the suppression. The management of such maladies must not be attempted without a physician.

In recent and mild cases, not connected with any organic disease, the emmenagogue tonic may be used three times a day; or the spiced bitters used, with one-tenth part of black-colush added. The lower abdomen and back should be bathed night and morning with a strong wash of cayenne, smart-weed, mustard, or other stimulant; and if the feet are cool, they may be washed with the same. Two operations a day may be secured from the bowels by the use of the liver pills; or by powders of equal parts apocynin, leptandrin, and capsicum—the size of a pea, or less, night and morning. Brandreth's and other patent pills, usually contain aloes; and their use often proves disastrous by provoking piles and inflammation of the womb. A few days before the proper time for the return, the patient may bathe the feet each night in very warm water; and at the same time drink a warm tea of pennyroval or hemlock leaves, as already directed in the fourth class of Tardy Menses. In addition, while still using the tonic, she may take a cold draught of a tea of camomile and black-cohush, every two hours

through the day. A tepid hip-bath the middle of each afternoon, will then also be a good aid.

Should the case not yield to the above course, the stomach, liver, and general circulation, will usually be much at fault. It will then be necessary to give a thorough stimulating emetic once a week, or even twice; and this invaluable measure should be bravely carried on, till the nervous depressions and arterial torpor fully yield. Morning and night, the entire spine, the abdomen, and extremities, are to be bathed with any of the stimulating washes already mentioned. The emmenagogue tonic, or the spiced bitters and black-cohush, are to be used three times a day; and every night, enough of the liver pills to secure one free motion of the bowels the next morning. A good laxative and tonic for such cases, may be made by infusing in a quart of wine, half an ounce each of motherwort, boneset, and may-weed (dog-fennel) blossoms, and one-fourth of an ounce of prickly-ash. A tablespoonful three times a day, would be a dose. This preparation is better for large and phlegmatic women, than for the small and sensitive. A tepid sponge-bath to the entire body, followed by the stimulating wash and brisk friction, may be used twice a week. Lymphatic women, of large frame, will be greatly benefited by a moderate vapor bath once a week. But all these measures will fail of producing their full effects, unless the stimulating emetics are repeated from time to time, in these protracted eases. As the anticipated period is approaching, the foot-baths and teas may be used, as above.

By thus restoring the general health, and exerting but a moderate influence directly upon the uterine organs, the frame will be put in the best condition for sustaining the monthly flow; and then there will rarely be any need of stronger uterine stimulants. In very obstinate cases, when the uterus seems too dormant to respond to these measures, others may be added. Thus, having faithfully used the emetics, washes, tonics, and liver pills, the emmenagogue pills may be used forenoon, afternoon, and at bedtime-still keeping up the other measures. The electro-magnetic current, passed from the spine through the uterus every second day, is then also valuable. In cold and phlegmatic constitutions, a warm tea of camomile or motherwort, with a tablespoonful or more of number six to the quart, may be injected freely into the vagina twice a day. But these measures should never be used, till after the former ones have cleared out the stomach and liver, and reestablish a good general circulation. Disregard of this advice, will most surely force heavy efforts upon the womb at a time when it is feeble; and this will lay the ground for a life of disease and misery, as every judicious physician well knows. For the same reason, no woman should resort to the use of aloes, savin, female pills of secret composition, and similar measures of violent action; which nearly always destroy the constitution, and often destroy the life. The course above given, will both restore the catamenia and invigorate the constitution.

When the menses appear, vigorous measures should be withheld, and the patient put upon the use

of the female tonic, or the spiced bitters. Continue these regularly; use the liver pills as needed; and give baths according to necessity. A few days before the next monthly period, use the emmenagogue tonie; and the evening foot-baths and drinks, if they seem necessary. In this way, a few months will suffice to restore the womb to the natural discharge of its duties.

When unhealthy habits, or mental dejection, is the eauses of the difficulty, medication will avail little till these obstacles are removed. A dry and light situation, out-door exercise and recreation, horseback riding, sufficient walking, scrupulous avoidance of dampness and night exposures, generous diet, light labor, well-regulated clothing, and cheerful society, are imperative. A young girl depressed through disappointed affections, must be dealt with mildly and with tenderness—not by scoldings and compulsion, but by love and mild reasoning and prudent counsel. Time and gentleness, with the hygienic course just mentioned, will usually suffice to restore the mental and physical tone.

Vicarious Menstruation.—This term expresses the fact that when the menstrual discharge is suppressed, some other organ may throw off a discharge resembling it. This is most commonly done by the stomach, bowels, lungs, or bladder; but sometimes it has taken place from the nose, nipples, eyes, ears, gums, an open ulcer, and even from the sound skin. It is usually a sanious or bloody discharge, coming on suddenly, and continuing at intervals for several days. It appears at the regular menstrual period,

when the natural uterine effort is made without avail; and it seems to be occasioned by the general plethora consequent upon the menstrual suppression. Generally, this vicarious flow is not large, and gives temporary relief to a distressing sense of fulness. Sometimes, however, the loss of blood is so great as to occasion weakness; and that from the lungs is not without danger. If neglected, it may continue for several menstrual periods; and a woman who has once suffered thus, may easily have the monthlies checked, and vicarious discharges provoked, by trifling exposures.

Treatment.—At the time, medication may not be called for, except bleeding from the stomach, lungs, or bowels, becomes too free; then, a tea of composition in tablespoonful doses, every few minutes; with hot irons at the feet and sides; and an injection of equal parts composition and lady-slipper powders in starch water, will be appropriate treatment. The diffusive drops, in a tea of beth-root, will also be suitable. Should the loss of blood be immoderate, the same treatment should be adopted that is elsewhere directed for flooding. After the attack, its recurrence should be provided against by the course of management already advised for chronic suppression of the menses.

#### FLUOR ALBUS

Fluor albus, the whites (or white flow), called also leucorrhea and female weakness, consists mainly of a whitish discharge from the vagina; may trouble females any time from infancy to the turn of life;

and sometimes appears after the turn of life, as a symptom of caneer or other severe disease of the womb. It is the most common of all female diseases; and it is searcely possible to find a woman in middle life, who has not decidedly suffered from it. The discharge is essentially of a mucous character; and comes from the mucous membrane lining the vagina and uterus. It may come from the vagina alone, as is most often the case; but may also flow principally from the lining membrane of the womb. It is dependent upon a weak, relaxed, and congested condition of these tissues; and is in all respects analagous to the flow from the nose in a catarrh or "cold in the head," when the mucous membrane of the nose becomes congested.

Fluor albus occurs under a great variety of eircumstances, but, apart from the fact that the luxurious, the lymphatic, and the nervous are most liable to it, the following classes will show the connections under which it is most generally found:

- 1. Young and delicate females may have a white flow periodically, for a few months before the appearance of the true menses. Such cases are alluded to, and the proper treatment advised, in the section on Tardy Menstruation.
- 2. When the menses are suppressed in a chronie form, a leueorrheal discharge may mark the proper period of their return and continuance. These cases are generally broken up by restoring the monthly flow.
- 3. At the "turn of life," a whitish flow may take the place of the regular catamenia.

- 4. Where the lochial discharge terminates after confinement, a leucorrhea may follow for a time.
- 5. Excessive menstruation may have leucorrhea precede and follow it a few days; and the fluor albus is very troublesome and weakening, in these cases.
- 6. It nearly always follows abortion, and continues almost incessantly for several months—leading to the worst symptoms of a chronic leucorrhea, and showing that weakness of the uterine organs which will predispose to repeated abortions.
- 7. It is very commonly abundant a day or more before the menses appear; and then continues profusely for several days after the menses cease. These cases generally arise from decided constitutional causes; are very persistent; and are accompanied by numerous very unpleasant symptoms.

8. In chlorosis, leucorrhea may appear alternately with, or entirely in place of, the regular catamenia.

In all or most of the above classes, the fluor albus is probably of uterine origin; and disease of the womb is a prominent complication, and needs the chief attention. But the 7th class is particularly free, in most cases, from all uterine disease; and resembles those cases which may come under the head of simple chronic leucorrhea from the vagina, in which the discharge is going on more or less abundantly all the time. This latter class of cases is more numerous than all the others together; and is the most troublesome from the facts that it is usually of constitutional origin, and is too generally neglected till it becomes deeply confirmed.

A severe leucorrhea of uterine origin, generally interferes with conception.

Symptoms.—Some cases of leucorrhea are of an acute character, being suddenly developed by mechanical violence, injuries during delivery, forcible attempts at cohabitation, highly stimulating injections, violent emmenagogues, worms in the rectum, etc. Such cases are accompanied by inflammation, the parts becoming dry, hot, swollen, red, tender, and painful. There may also be feverishness, itching of the privates, and extreme soreness, with weight and pain through the pelvis and thighs, and scalding or retention of the urine. After two days, a thin, acrid, and watery discharge sets in; and this discharge sometimes becomes thick, ropy, yellowish, or even greenish. Usually, the difficulty subsides in nine or ten days; but cases of violence during delivery by instruments, may be followed by ulcers, abscesses, and even mortification of the parts.

Acute leucorrhea is not common, and the great majority of eases are of a chronic character. These may follow an acute case, or may be the direct results of cold, excessive coitus, uncleanliness, the use of pessaries, and similar local causes of congestion and weakness. In nearly all instances, however, chronic leucorrhea is either caused or kept up by some decided constitutional disturbance. This fact is too generally overlooked in the treatment of the malady—which is usually directed to the disease as being of a purely local character; when in fact no treatment can be of any permanent value, except it remove the deprayed condition of the body at large.

Among these constitutional causes, may be mentioned all those errors of diet, living, sleeping, clothing, etc., which have already been mentioned as causes of menstrual derangement. Indeed, these may be considered altogether the grand causes of this malady; and hence no plan of treatment can be effective, until it enjoins light and nourishing diet, abstinence from stimulating food and drinks, dry and light habitations, early hours, moderate daily labor, occasional bathing, and all those other hygienic regulations which keep the skin pure, the stomach and liver in good action, and the circulation free. But any severe disease of the stomach and liver-as dyspepsia, chronic inflammation of the liver, jaundice, etc .- may provoke and prolong a case of leucorrhea.

The symptoms of a chronic case are at first trifling; and generally are passed by as of no consequence, till the malady slowly settles into a very unmanageable one. The discharge is thin, white, very small in quantity, and occurs only at intervals. There are pains and aches through the back and loins, the woman feels week and nervous, and digestion is not good. As the difficulty continues, the discharge becomes more abundant, and often passes away in slight gushes, and is mixed with some ropy mucus: the aching in the back becomes constant and annoying; the bowels are inclined to costiveness; dyspeptic and nervous symptoms increase; and the feeling of languor is oppressive. In still worse cases, there is a partial prolapse of the uterus, with sense of weight and dragging in the pelvis; the

countenance becomes pale or sallow, and the eyes and cheeks sunken; there are a bad breath and belchings of wind (which is usually sour and nauscating); the liver gets quite torpid, and the bowels strongly eostive; failing appetite, indigestion, nausea, and perhaps actual vomiting, mark the extreme derangement of the stomach; the eyes loose their lustre and have a dull line under them, with puffiness of the lids; and the most ordinary exertion is fatiguing. The woman at the same time becomes sad, melancholy and peevish; sighs frequently; suffers dizziness, palpitation and faintness; and often has colicky pains and cold extremitics. This is an appalling array of symptoms; yet they are such as currently belong to a chronic case of leucorrhea, and go to render the life of such a patient miserable. In addition to these, the discharge may be acrid and excoriating, causing burning and pain of the vagina; or it may become streaked with blood from ulceration; or greenish, brownish, and fætid, from a very vitiated state of the system. Decided menstrual derangements are also quite sure to follow; coitus is quite painful, in most cases, from an early stage; and congestion, swelling, tenderness, and ulceration, may occur at the mouth of the womb.

Scrofulous persons, and those of a lax fibre and lymphatic temperament, are most subject to both forms of leucorrhea. The duration and progress of the malady are very various, sometimes reaching an extreme degree of prostration in a few months, and again not becoming severe in its constitutional disturbances for many years.

Treatment.-In acute cases, the patient should lie on a hard bed, and keep quiet; the diaphoretic mixture may be used, if there is any feverishness; and the addition to this of cleavers, water-melon seed, quince seed, burdock seed, spearmint, catnip, or balm, will moderate the scalding of urine and heat of the parts. If the soreness is great, a poultice of one part lobelia herb and two parts of elm, should be applied to the vulva, at a blood heat; and the vulva should be washed with a lukewarm lobelia infusion, and afterward smeared with lard or sweet oil. The bowels should also be gently moved with the liver pills, and only a light diet used. When the acute symptoms abate, the vagina may be syringed two or three times a day with a cool (not cold) tea of beth-root or raspberry leaves, with a little golden-seal added; and the female tonic used. These measures will strengthen the parts, and avert the tendency to chronic leucorrhea.

In chronic cases, the patient must avoid stimulating dishes, exposures to dampness, feather beds, and similar exhaustive and relaxing habits. At the same time use the female tonic; keep the bowels regular with leptandrin or the liver pills; and use a cool female injection of witch-hazel, raspberry, beth-root, or sumach leaves, twice a day. The infusion should not be made too strong; and one-fourth part of golden-seal or dog-wood may be added to the astringents used in the injection. By these simple measures, conjoined with a plain diet and restraint from sexual indulgences, incipient cases will be broken up in due time; and even cases

of some standing may thus be cured by perseverance.

But when the patient has suffered long, and become weak and dyspeptic, a much more vigorous course will be demanded. As this class of cases is generally of uterine origin, the leucorrhea seems to be an excessive flow of degenerate menses; and the constitutional treatment proper for profuse menstruation, will be very appropriate here. A stimulating emetic may be given at least once a week, till the dyspeptic symptoms improve and the frame begins to rally; and then repeated at such intervals as the symptoms demand. Abundant experience has proven that by thus vigorously breaking up the torpor of the stomach and liver, and restoring freedom to the general circulation, the most valuable and necessary steps are taken toward curing a leucorrhea; for as these distant maladies so weaken the uterus as really to be at the foundation of fluor albus, it is generally futile to attempt the cure of a bad case of leucorrhea without using these emetics. Between the emetics (or in their absence, if they are omitted), the female restorative may be used regularly; or the compound of dogwood, comfrey, yarrow, etc., mentioned in Profuse Menstruation, may be used. Another excellent tonic and nervine, particularly suited for nervous females, may be made as follows: solomon-seal, wild-cherry bark, colombo, each four ounces; bark of gray-ash, and black-haw, each two ounces; tinctured on half a gallon of malaga or other wine, and used as the female restorative. The berries of the large (or giant) solomon-scal, are a good addition to golden-scal or other tonic.

Great care must be taken to keep the liver and bowels in regular action, but not purged. The liver pills may be used; or perhaps a more suitable one may be formed by combining the following solid extracts: two parts wahoo, one part eac grayash and yellow-parilla; stiffened with powdered black-root and prickly-ash in equal parts. Two or more of these may be taken at bed-time; and also in the morning, if needed. In lieu of making the extracts into pills, the crude articles may be formed into a thick syrup, and used in suitable quantities. The feet, if cold, should be bathed night and morning in a strong wash of red-pepper or mustard; and the back may be bathed with the same, if it pain much. A tepid bath may be given once a week; but it should always be followed by a general wash with the pepper infusion, and then by thorough friction; for tepid and warm water, if not at once followed by stimulants and friction, will relax the surface and prove a disadvantage to leucorrhea. So much is this the case, that relaxed and lymphatic women—especially in cities—many times date the commencement of their fluor albus to the use of warm baths

While these measures are all necessary to restore the general health, and must be used with perseverance, local appliances must also be used. Some persons attempt to cure leucorrhea by washes alone; but this practice will fail, because this malady is not a purely local one. Yet the parts become weak,

relaxed, and feeble; and no treatment is complete. unless it cleanse and strengthen them. Injections of astringent and tonic substances are generally used for this purpose; but the discharge is often so viscid as to cling to the passages, and will need to be washed away before any medicated injection can possibly touch the tissues. The proper plan is, first to cleanse the vagina by freely injecting into it a lukewarm suds of castile soap-made tolerably strong. Follow this immediately by the medicated injection -using it at a mild tepid heat. Among the articles good for this purpose, are raspberry, witch-hazel, and sumach leaves—an ounce to a quart of warm water; beth-root, cranesbill or geranium, and hemlock bark-half an ounce to a quart. One-fourth or one-half part of dogwood bark, white-poplar bark, or golden-seal, will make a valuable tonic addition to any one of the above astringents. Such preparations will meet the majority of cases; but when the relaxation of the parts is very great, and the discharge quite profuse, oak bark, red-willow bark, hard-hack, or alum root-half an ounce to a quart of water-may be used; and either of the above tonics added. In bad cases, where the discharge is offensive and the parts not irritable, half an ounce or more of yarrow to a quart of water, will be very valuable. In some extremely degenerate cases-where there is an utter absence of all ordinary sensibility, and the discharge is quite feetid, half an ounce each of bayberry and golden-seal to a quart, will be most appropriate; or sumach bark may be used in lieu of bayberry. A tablespoonful of number six to a pint of water, may be used in similar cases. When the discharge is fœtid, and the parts irritable, a tablespoonful or more of tineture of myrrh to a pint of water, is a most suitable injection. All such injections should be used not less than twice a day; and the stronger ones should be changed for milder, as the case improves.

If the case is associated with prolapsus, this same treatment will be suitable. Complications of ulcers, tumors, hydatids, and profuse or deficient menstruation, must be met as they arise, by judiciously combining suitable portions of the treatment for leucorrhea with the treatment for the other malady.

## CHLOROSIS.

Chlorosis, or "green sickness," has been named thus from the fact that it is accompanied by a paleness which sometimes presents a peculiar tint of greenness. It is most common to young girls during the earlier months of menstruation, but may appear at both earlier and later periods of life. A half chlorotic condition sometimes afflicts women at the turn of life.

Symptoms.—It almost invariably commences with constipation; and as young people are very liable to neglect the function of the bowels, this derangement increases and soon causes its usual train of symptoms. The girl becomes sad, melancholy, and indisposed to either exertion or pleasure; grows petulant and whimsical; sighs often, and weeps at trifles; looks pale, languid, and disheartened; the lips look blanched, the eye-balls pearly, and the eye-lids

puffy and bluish; the pulse is too frequent, the extremities are cool, and the appetite is poor and variable. Breathing is disturbed—inspiration being at times very difficult, the patient making half-grasping efforts to take in breath, and complaining of smothered feelings. Poor digestion; whitish, hard, (or perhaps fluid) stools; palpitations; increasing lassitude; strong inclinations to listless repose; almost icy coldness of feet, hands, nose, cheeks, and ears; puffiness about the ankles; and a thumping action of the heart much of the time, mark the advance of the difficulty.

Still later in the disease, the stomach becomes greatly deranged. The appetite ealls for such anomalies as chalk, vinegar, salt, plaster, slate pencils, ehareoal, earth, ashes, etc. Sometimes the patient loathes all food, but at others eats like a gormand; while weight and pain at the pit of the stomach, nausea, and even vomiting, follows the use of food. Nausea and belehing of sour wind, are eommon; the tongue is heavily eoated with whitish mucus; heat in the stomach; nervous pain along the esophagus and shooting through to the shoulders; pale and scanty urine, voided often; alternate constipation and watery diarrhea; and profuse leucorrheal discharge, become leading symptoms. The menses are usually suppressed, but may be profuse and long-continued; and neuralgie or "eolieky" pains through the pelvis, are not uncommon. The nervous derangement becomes very prominent—the patient growing capricious and irascible in temper, melancholy to the verge of great despondency; and

passing the days in paroxysms of anger and despair, and the nights in horrid dreams and broken slumber. It is at this stage that the skin assumes the earthy, greenish hue peculiar to the malady; there are also dizziness, ringing in the ears, derangements of sight, and tremors of the limbs, strong palpitations, faintings, thirst, swelling and hardness of the abdomen, neuralgia in the teeth and head, and emaciation may at last show themselves prominently. There are usually some dropsical swellings; and finally a violet color of the lips, extreme feebleness and general dropsy, precede death.

These symptoms may not all be present, nor occur in the precise order and degree named; but they are such as may be expected in any case not properly managed both by hygiene, moral influences, and medication. The malady is one of the greatest predisposers to consumption, and may be neglected till it developes the latter complaint. It also leads to hysteria; spinal curvature generally occurs in these subjects; and a chlorotic patient in apparently no danger, may die suddenly from the stomach being eaten through by ulcers caused by the outlandish articles taken into the stomach by these patients. Such serious facts should give timely warning to the friends of any girl troubled with chlorotic symptoms; and if these probable consequences of this malady were properly understood, women of sense would be less anxious to bring upon themselves that paleness of complexion and languor of spirits which the absurdities of fashion now pronounce so "genteel." As Dr. Tilt has aptly remarked: "Chlorosis originates in a diminution or a perversion of the power of nutrition, and may be induced in vegetables [by depriving them of air and light]; but the absence of natural color, and the tenderness of tissue, which it is so satisfactory to meet with in celery and lettuce, is a deplorable condition in a young lady. Such persons are in every way below par. Their constitution is without stamina; and, when subjected to any of the causes of disease, they rapidly become its victims."

Causes .- A rapid and premature growth, with insufficient light, air, exercise, and healthy food, commonly predispose to chlorosis—especially in girls of lymphatic or nervous temperament, and in those inclined to scrofula. Menstrual derangements, whether too free or long suppressed; heavy grief, disappointment, and similar strongly-depressing emotions; onanism, and too free amorous indulgence, are among predisposing causes. The more direct and immediate developing eauses, are the following: Indigestible, or insufficient and unwholesome food; damp, dark, and ill-ventilated habitations—as in mines, basements, dark streets, rooms shut up from sunshine; houses too closely surrounded by heavy trees, crowded workshops, etc.; idle, sedentary, and luxurious modes of life; excessive indulgence in vinegar, and acid or green fruits, and all similar influences which derange the nervous system, disturb digestion, and cripple the natural development of the body. Of all the more immediate developing eauses, "none is so frequently observed as the applieation of cold and wet to the feet and legs, particularly during the flow, or a few days before or after its appearance." (Dr. Tilt.)

Treatment.—Although usually placed among the diseases of menstruation, chlorosis is essentially an affection of the stomach, liver, bowels, and nervous system; and the disturbances of the menses usually occur as consequences of these, though (as already stated) difficulties of the monthly flow may quickly aid to develope chlorosis in one already predisposed to it. But even in such cases, the courses would scarcely have suffered derangement, except for the lack of good physical development, and the indigestion and costiveness which lay the foundation for chlorosis. This fact should be well remembered; that medication may be directed where it properly belongs, and no violent measures forced upon the uterus beyond its actual need.

The first and leading point in treatment, is to secure the patient a light, dry, and airy situation; and then some regular out-door exercise. There must also be some daily labor of a moderate kind. Light household duties are usually best; but riding, rowing, swimming, flower or kitchen-gardening, and similar out-door combinations of exertion with pleasure, must be regularly followed. These patients have a strange aversion to any labor, and think it a most bitter hardship to be compelled to make the least exertion; but the stronger this aversion, the greater the necessity for some labor every day. Parents must not be harsh and cruel, but must rather be forbearing and moderate with all kinds of whims, and in every way cheer the mind and divert

it from depressing thoughts; yet they must be firm and unyielding in this matter of labor, provide some regular and light duties of a muscular character, contrive to make them as attractive as possible, but insist upon their daily performance—despite complainings, oppositions, persuasions, and even tears. Then follow the daily tasks with due recreations; and carefully provide pleasant and cheerful society. Also give the girl a light, well-aired, and roomy sleeping apartment; let sunshine into every room of the house; and regulate the habits of eating, sleeping, and dress, in the manner already directed in the chapters on Puberty and Tardy Menstruation. Medicines will scarcely be of any service, till these matters are carried out faithfully. Singing and reading aloud, swinging the arms well backward, and similar gymnastics for the chest, are invaluable.

The action of the liver and bowels must be regularly, but mildly, sustained. All harsh purgatives (as aloes, gamboge, mandrake, jalap, and most patent pills,) must be avoided. The liver pills are very suitable; or any form of black root, bitter root, or butternut bark, may be used. An injection of tepid water, or very weak castile suds, each morning, will be a decided advantage. Sustain digestion by the use of spiced bitters. If there are strong nervous symptoms, the female tonic will be best; the compound lobelia pills may be used in addition—one or two at bed time, and the same dose each forenoon and afternoon. These pills are also good for the shortness of breath. If there are hysterical symptoms, (which are sometimes very severe), let the

case be managed as elsewhere directed for hysteria. If the menses have been suddenly suppressed, use the emmenagogue tonic, and take other suitable (but mild) measures to restore them. If the menses are too profuse, use the female restorative, and the other means for profuse menstruation. If the menses are tardy, read the chapter on that difficulty, and follow its directions.

By thus sustaining the action of the bowels, and using that form of tonic most fitting the state of the nerves, or of the menses, most of these cases will at once begin to improve. But when the case is deeply settled, nothing will relieve or "break" it, till emetics are given. They should be repeated at least once a week; and when the symptoms are urgent, may be required two or three times a week till a change is effected. The power and usefulness of this measure, are beyond all valuation. Baths once a week, are necessary; but should always be of tepid water, and followed by thorough friction. If the skin is cold, it may be necessary to sponge the surface once a day with a wash of red-pepper, smart-week, or other stimulant.

A caution may here be given against the use of all preparations of iron. They are commonly employed, in the belief that iron enriches the blood and improves digestion; whereas its use will weaken the stomach and promote hemorrhages—both of which are extremely hurtful in chlorosis. With the current treatment of this malady by pills, and powders, and waters, and sirups of iron, it is no wonder

that scarcely one in ten of these eases ever regains good health.

# CESSATION OF THE MENSES.

Cessation of the menses, the turn of life, or the change of life, usually occurs about thirty years after the appearance of the flow, or about the fortyfifth year of life. Not uncommonly, however, it eomes two, or three, or even five years earlier; while again it may continue till fifty, in some cases has lingered till seventy, and in a few very remarkable instances has remained even longer than that. M. Orfila, of Paris, records the case of a woman who became pregnant for the first time at the age of forty-seven, gave birth to her seventh (and last) ehild at sixty, and continued to menstruate regularly till her ninety-ninth year. She died at the age of one hundred and fourteen. Meiselier relates the case of a woman who first menstruated at twenty; gave birth to her first child at the age of forty-seven; had the flow cease at sixty-two, and re-appear at seventy-five; had it then continue till ninety-eight, stop again at one hundred and three, and recommence at one hundred and four. In such cases, the power of reproduction is not continued after the first eessation of the flow.

This-cessation is a perfectly natural occurrence, and is not therefore to be dreaded as something necessarily terrible and fatal. The frame having reached that degree of solidification which would make child-bearing hazardous, the functions of the uterus are completed; and as the menstrual flow is but the

escape of material otherwise designed for the development of the fœtus, it properly ceases when the duties of the womb are terminated.

The menses do not stop at once, but abate gradually-commonly occupying a year from the first sign of diminution to their final cessation. women who have always been very temperate in their habits, and moderate in their feelings, the discharge may gradually diminish, and disappear without causing any peculiar disturbance of the More commonly, however, considerable irregularities in the flow are suffered; and the whole body undergoes various agitations, till it gets accustomed to the suppression of a discharge of such long continuance. As the period of change approaches, the catamenia may return a little too early each month; or they may be delayed a week or more beyond the proper time. The quantity may also be increased at some times, and diminished at others; and the woman usually looks pale, and becomes a little feeble and nervous. After showing these irregularities for a few months, the flow may return every two weeks or ten days for a few times; and then suddenly cease altogether for a few months; and after that return for a season with unwonted profuseness. These variations may be repeated during a year or more, till finally the discharge becomes pale, then white and serous, and then ceases entirely.

While these changes are going on, some females have enlarging of the breasts and abdomen, with a capricious appetite; and may imagine themselves to

be pregnant. Strong and plethorie women are very liable to dizziness, flashes of sharp heat about the head and face, headache, and perhaps bleeding at the nose. These symptoms are due to a rushing toward the head of that surplus blood which formerly eseaped by the uterus; and such persons usually look purplish-red in the face, and their eyes look reddish, while the pulse is generally full and bounding, there is more or less distress about the heart and difficulty of breathing, and the sleep is much disturbed by bad dreams and sudden wakings. These latter feelings are due to a pressure of blood toward the heart and larger blood-vessels. On the other hand, slender and siekly women may suffer extreme irritability and sense of prostration; become emaciated, pale, wan, and half ehlorotic, with occasional flushes; have the abdomen shrink and the breasts wither away; become depressed, melancholy, taeiturn, and hysterical, with peculiar irritability of temper. All elasses are liable to pains in the back, pelvis, and loins; to much itching of the vulva; and to the above-named distress about the heart.

Women are usually very apprehensive, while these changes are going forward; but though their sufferings are often considerable, and may at times be dangerous, they are nearly always quite curable, the woman herself can control the causes of most of them, and it is a peculiar fact that fewer women than men die between the ages of forty-two and forty-nine. Nature is so provident of her resources, that she will not impose the turmoils of this period

upon woman, without providing adequate supplies of vitality to meet them. Those who, before the change of life comes on, and especially during the early years of menstruation, have exhausted nature by high living, intemperate excesses, relaxing and sedentary indolence, and other vicious habits, will have a much more severe and tedious time than those who have led calm, regular and temperate lives. Yet not many of even the former class, will die during this period; and the temperate and pure may confidently expect, in nature's own time, a happy termination of their annoyances. Unpleasant feelings must be expected, for no considerable discharge (at any part of the body) can be checked without disturbances; but nature usually compensates for these, by according to the woman an after-life of superior health. If she has not previously broken down her own constitution, she now, under proper management, has before her the prospect of a good old age, with entire freedom from all her previous uterine difficulties, a good appetite, sound digestion, refreshing sleep, and mental equanimity.

But let it not be concealed that there are scrious maladies sometimes connected with this menstrual change. Cancer, especially that located in the womb, may now develop itself in those who have cancerous constitutions. Ulcers upon the surface, hemorrhage from the lungs or bowels, piles, cutaneous cruptions, and severe dyspepsia, sometimes arise, and continue through after life. In a few instances, palsy, paralysis, and even apoplexy, have arisen from the excessive and unrelieved pressure

of blood now thrown upon the brain. But, as already intimated, the dangerous complications generally occur in those whose previous lives had been filled with scenes of passion, pleasure, and different kinds of excesses. From all such, exhausted nature now exacts a stern settlement for the manner in which they have been wasting their existence; and if there were no other inducement for a woman to lead a mild, prudent, and restrained life, the prospect of thereby securing to herself safety and health at the decline of her menstrual period, should be sufficient.

Various physical changes take place at and after this time. The womb diminishes in size and becomes more dense; and its neck gradually shortens, till it almost entirely disappears. The skin also loses its former fairness and elasticity, and appears more thick and wrinkled. Plethoric women often become quite corpulent; and even slender women may grow pretty stout, and develope a full abdomen and breasts; but others get very thin, shriveled and wrinkled, sallow, and waxy. The voice usually becomes firmer and heavier, and the mind stronger and more sedate; though women who have led a life of excesses, or of exhausting toil, and now fall into feeble health, may acquire a peculiarly sharp voice and a remarkably perverse disposition. Man, who has so much to enjoy from the placid and vigorous old-age of his bosom companion, should see to it that her child-bearing period is not made one of wearying labor, unwholesome eating, and excessive maternal duties.

Management.—To pass this period happily, depends far more upon hygienic management than upon medical treatment; and a thoughtless resort to patent medicines and strong compounds (especially purgatives and emmenagogues) is a very improper practice. The first rule of conduct should be, to take no medicine whatever, except the symptoms of disease become unusually severe; and then to avoid all violent agents of every kind, and use those mild and quieting articles suitable to the particular class of symptoms that may arise. Women often drug and physic themselves into the grave, by allowing their apprehensions to overpower their judgment, and by "trying" the recipes of many well-meaning but greatly-mistaken female advisers. This period is a crisis—a time which may easily be turned into one of melancholy seriousness; and nature should be allowed to work out her own changes quietly, and without interference except when really necessary.

All occasions of mental excitement and agitation should be avoided; and the daily surroundings should be of that quiet and calm character favorable to mental repose. A little cheerful company is needed; but parties and much company are bad. There should be a moderate amount of daily exercise, such as the lighter duties of the household; but all-heavy labor must be discontinued. Much sewing, reading, and other sedentary occupations, will bring on nervousness and languor; hence the woman should go abroad frequently, and those in a city should escape from it to the country as much as possible; she should attend somewhat to flowers and

fruit and the garden, go visiting rather frequently, take short journeys abroad, etc. The diet should be scrupulously regular and plain; salt and spiced meats, rieh gravies and pastry, and all high seasoning and condiments, should be carefully avoided: and vegetables, ripe fruit, succulent plants, and the softer classes of fresh meats, be made the preferable food. Coffee, and all fermented or alcoholie drinks, must be forbidden. The dress should be loose, and always warm; the lower extremities must be particularly well elad; and flannel should be worn next the skin through all but the very liottest months of the year; and in changeable climates, thin flannel should be worn even in mid-summer. A hard bed is altogether to be ehosen; early retiring and early rising are indispensable to those of a fleshy build; and long morning naps are particularly bad for them, though slender and nervous women should be allowed all the sleep they can get-even to a nap after dinner. The woman ean not be too serupulously eareful in guarding against wet feet, damp elothing, low and damp houses, and a close room. All sexual intercourse must be interdicted, till the body has completely settled into its new quietude.

The above regulations being strictly regarded, medicines of a mild nature may then be used as needed. Costiveness may be met by a regular morning hour of going to stool; the use of ripe fruits, succulent vegetables, and brown bread; and an injection of tepid water and molasses (or honey, or brown sugar, or boneset), fifteen minutes before going to stool. If then really necessary, a small doso

of leptandrin, or of the liver pills, may be used at times; but let it be repeated that all active physic and free purgation must be avoided, even if strong symptoms of "biliousness" should arise. Dizziness, and headache, and flashes of heat, are mitigated by the diet suitable for eostiveness; but may be further relieved by drinks of whey, tepid (or even warm) sponge-baths followed by only light friction, a lobelia pill every six or four hours, and a nightly warm foot-bath when the feet are eool. There is a strong popular prejudice against warm foot-baths; but this prejudice is unfounded, when the cool feet and rush of blood to the head show a disturbance in the balance of eirculation, which foot-bathing may relieve. Apoplectic symptoms may be saved thereby; and in very troublesome cases of this kind, an injection of half or even a whole teaspoonful of lobelia and lady-slipper, will be a valuable addition to the other measures. Tepid baths, or those of a temperature a little above 90°, may be employed once a week, with decided benefit. They not only avert pressure of blood upon the brain, lungs, and heart, but also give the greatest relief from the strong nervous feeling so common to this period, remove the excessive secretions that often accumulate at the surface, and greatly benefit those who suffer from profuse perspirations. The higher temperatures of the bath can be borne at this period of life, better than at any other. If the courses have not yet fully ceased, no bath should be given for a few days before or after their monthly appearance. Friction (not too heavy) with the bare hand of a friend, is often a great soothing measure to these patients, and should never be forgotten after the baths; and much relief may be obtained by resorting to it once every day.

In very nervous women, the female tonic may be used; with an injection of an even teaspoonful of lady-slipper or scullcap powder at night; and a compound lobelia pill every eight, six, or four hours through the day. The same course may be pursued, if the pains about the loins become severe; and the warm hip-bath may also be used once a day, or less frequently, as needed. If the menses stop very suddenly, the abdomen swells, and pains and strong nervous agitation follow, the patient must pursue the milder portion of the treatment directed for light cases of Suppressed or of Painful Menstruation. The stronger and more revulsive portions of that treatment must by no means be attempted; for nature does not now require it, and will not put up with it, but-by the aid of the milder measures-will duly re-establish the menstrual discharge, if necessary. Should the discharge suddenly become profuse and exhausting, it is a ease of uterine hemorrhage with relaxation of the womb, and must be checked by the most vigorous measures suitable for Profuse Menstruation. But where the menses have been cheeked for several months, and then return freely but without any clots of blood, too much haste must not be made in resorting to powerful measures for arresting the flow; as such a case is only an escape of menses that had accumulated, and will do no greater harm than frightening the lady for a time. A position on the back, and some warm composition tea (or diffusive drops in raspberry tea), will be sufficient; till the appearance of clots and faintness show a true hemorrhage, and call for the more vigorous measures. The woman must keep calm, and not try to frighten herself, for there is no need of it.

Should bilious diarrhea set in, a liver pill, or dose of leptandrin, night and morning, and a teaspoonful of neutralizing cordial every second hour, aided by a recumbent position, will presently check it.

By the eareful pursuit of these measures, a few months will generally restore quiet to the frame, reestablish unusual good health, and open the prospect of a hale and hearty old age. In conclusion, let it be especially enjoined upon the husband and friends of a woman passing through this change of life, that they must uniformly treat her with kindness, tenderness, and the most considerate respect; bear patiently with her nervousness; and meet her fears, caprices and petulence by exercising toward her calmness, reason, forbearance, and watchful concern for her welfare, but never show to her any sharpness, moroseness, exactitude, or indifference to her feelings and anxieties. A virtuous and humane regard for the parent of our species, demands from us the utmost exercise of love and tenderness while she is passing through this agitating period of her existence.

#### HYSTERIA.

Hysteria or Hysterics, is an affection of the nervous system, associated generally with disturbance of the reproductive organs—whether of man or woman. Dr. Meigs very aptly says: "The question

is not so much whether hysteria arises from a disturbing power of the womb, as from a disturbing power of the reproductive agencies implanted in the economy; and I conceive that deviations of that power, or those agencies, whether in the male or the female, may be alike regarded as the great first causes in these maladies." It is an affection most common to single women and to widows; rarely occurs before puberty or after the cessation of the menses; and mostly attacks those of strong nervous susceptibilities, and inactive or sedentary habits.

Symptoms.—The more ordinary, continuous, and distressing symptoms of hysteria, have their origin in the brain; and the violent attacks occur in paroxvsms or "fits." Such paroxysms are usually preceded for a time-varying from one to several days -by depression of spirits, needless anxieties of mind, weeping, etc. The fit approaches, usually, with a pain in the left side, palpitation of the heart, oppression of the breath, and sickness at the stomach; the pain passes to the stomach, and thence rises into the throat—where it feels like a ball lodged in the passage, and gives an alarming sense of suffocation. The fit may now present itself in alternate spells of laughing and crying, with restless movements of the body, somewhat incoherent talking, and occasional screams. These agitations may last from a few minutes to half an hour, or more. In other cases, spasms of the muscles occur, and become extremely violent. The shoulders are usually drawn backward; the neck, arms, lower extremities, and trunk, become intensely rigid; and the various parts

of the body, as also the features, may be greatly distorted. Tremors, or slow spasmodic movements, may pass over various parts of the frame; the eyes arc usually open, fixed, and very staring; the face is either pale or flushed, and the paroxysm passes off in a short time with violent agitations of the body. In other cases, the patient is violently agitated throughout, tosses about in the wildest manner; and would excite the keenest apprehensions, if the nature of the attack were not understood. yet other instances, the patient lies listless, and apparently in a stupid sleep. Some persons never have any other paroxysms than violent spells of spasmodic sighing, or of wringing the hands, or of hiccough; though these symptoms may occur together, or may precede the more violent symptoms. The hiccough may continue two or three days, and is occasionally very serious.

In some instances, the patient has a full sense of all that is transpiring around her, even though apparently bewildered; but it is not true that all have this knowledge, for many possess no recollection whatever of the events of the paroxysm. The fits commonly pass off with belching of wind, sighing, and perhaps sobbing; and pain in the head, and soreness of various parts of the body, will follow. This soreness is at times so great as to resemble rheumatic pains in the joints, etc. The paroxysms observe no periodicity of return, yet are most frequent about the time of the menstrual changes.

Between the paroxysms of suffering, as well as before them, these patients are afflicted with the

greatest possible variety of nervous derangements. The class of symptoms presented, will depend upon the organs most prominently disturbed; for the nervous tissue in every structure of the frame, seems liable to this hysterical susceptibility. Melancholy, distressing fears, and painful auxieties, are quite constant; and at times become so overwhelming as to make existence miserable. The stomach may be affected with indigestion, sour belchings, variable appetite, and choking sensations; there may be spasms and pains in the bowels, pain in the right side, and very deficient secretion of bile; the urine may be pale and remarkably abundant, or scanty, high-colored, fetid, or even bloody; palpitation of the heart and faintness are quite common; tenderness of the scalp, and heat or coldness on different parts of the head, may also occur. These symptoms may be presented in all manner of combinations; and in degrees of intensity varying from trifling sensations to the most vexatious and prostrating uneasiness. The pains are rarely acute, though they may seem to the patient to be very severe; and they may shift from part to part every day, or even several times a day, and thus lead to a variety of complainings that may seem almost whimsical.

These patients are usually thin and delicate; but some fleshy and florid women are among the worst of hysterical subjects. All classes are prone to a peculiar hallucination, or kind of morbid sympathy, which leads them to complain of nearly every malady they hear described; and there is no doubt but that, for the time being, they feel as miscrable as if

they really did have it. Many times, they conceive themselves afflieted with a given form of disease; and may complain of it with the utmost consistency for months, or even for years. Acute pains in the side, or just above the eyebrows, or in the spinal column, are among the most common of these simulated maladies. Inflammation of the bladder, or the womb, or the peritoneum, is sometimes complained of with the utmost persistency. There may be suffering (or uneasiness) in any one of these parts; but by the intensity of imagination, and by allowing the patient to be long confined to bed, as if actually afflicted with such serious maladies, the woman may in time become almost hopelessly bed-ridden. will require all the skill of the physician to detect some of these eases; and all his resources of science and strategy, aided by the hearty co-operation of the friends, to break up the hallucination. Palsy is also sometimes simulated; so is a peculiar barking cough; and a woman (or man) of strong hysterieal susceptibilities, is liable to participate in any paroxysm, frenzy, or other violent emotion of mind or body, which another person is seen to suffer. Catalepsy, and a mental condition known as ecstaey, are sometimes connected with hysteria; but these complications belong rather to the profounder studies of the physician, than to a work for the people.

Causes.—Whatever enfeebles the frame slowly, and especially undermines the nervous system, may become a predisposing cause of hysteria. Among the most prominent of these are, sedentary habits; indolent and luxurious modes of life; heating diet;

too much care, anxicty, grief, or sentimental reading; disappointed or abused domestic affections; or the use of narcotics, or alcoholic drinks, strong cathartic or other deplctive and irritating agents, and even the excessive indulgence in strong tea and coffee. When the predisposition has thus been brought about, any ordinary excitement may provoke a spasm or fit, in most patients; though some persons do not yield to any direct provoking cause till it has been long-continued, and such usually have the most violent, persistent, and repeated paroxysms. Anger, grief, joy, fright, jealousy, disappointment, and erotic reading, pietures or conversation, are exciting eauses. Sudden suppression or profusion of the menses, sudden and profuse leucorrhea, excessive coitus, masturbation, and forced continence, are also frequent excitants of hysteria. Highly-seasoned or salted foods, ice-cream, and other indigestible substances; worms; and the sight of another person in a spasm, are very likely to induce an attack.

Treatment.—Though hysterical paroxysms look frightful, they need excite little fear as to the patient's safety; nor will this malady ever prove fatal, except when it is connected with some other malady which is serious. Yet these facts should not lead any person to slight a hysterical patient; nor is it at all proper, or in any way humane, to make light of the aches, pains, and nervous fears, of these patients—as is too often done, and that by women. These patients may do much, by mental exertion, to overcome their fears and cheek their

feelings; but can not control them entirely, and, may not be able to curb them beyond a most trifling degree. Rightly viewed, a person liable to hysterics, is one deserving of sympathy and condolence; and should receive every tender care, instead of being neglected and laughed at. And yet it is absolutely necessary, in dealing with them at periods of paroxysm, to be decidedly firm, and even a little mandatory; for the exhibition of much sympathy or solicitude in their behalf, may be the signal for a fit; or may leave half a dozen hysterically-inclined females, who may witness a paroxysm in another, to go into fits themselves.

During a paroxysm, loosen every article of clothing that may be tight around the patient's neck or waist; and place her where she can have plenty of air, and room to toss about. Do not attempt to restrain her movements by violence, except when necessary to keep her from injuring herself. If she seem too warm, fan her gently, but not violently. If she lie still and stupid, do not be alarmed. In light cases, some cold water dashed or poured from a hight upon the face and neck, as the paroxysm is coming on, may stop it; and so may slapping the palms of the hands, or soles of the feet; but these measures do good only at the onset, and need seldom be repeated during a paroxysm. When the patient can swallow, the antispasmodic mixture may be used; or one part of lobelia tincture and two parts of diffusive drops, may be given in doses from half to a whole teaspoonful, every ten or more minutes. Or these drops may be given in one or more tea-

spoonsful of lobelia tea; or the same quantity of third preparation of lobelia may be given in warm water, or in a tea of eatnip, sage, spearmint, etc. Compound spirits of lavender, and tinctures of lobelia and lady-slipper, in equal parts, may be used; or tincture of assafætida may be substituted for the lavender. If the paroxysm continue long, or swallowing is difficult, the antispasmodie mixture may be given as an injection—a teaspoonful in a gill of thin starch water or eatnip tea. A tablespoonful of tineture of assafætida, may be used in the same way; and either of these injections may be repeated every half hour, if necessary. Such measures will usually rally the patient in a short time. To prevent an early recurrence of the paroxysm, the patient should be kept quiet; the antispasmodie mixture may be used every half hour, or any one of the above preparations used in its place; and the bowels, unless they have aeted quite recently, should be moved by a large enema of a mild eathartie nature—as water and molasses, salt and water, or weak eastile suds, given warm. If there is much pain, aching, or nervous startings, the cathartic enema may be followed by one of lady-slipper, boneset and seulleap, in equal parts—a teaspoonful of the combined powder in a gill or less of thin stareh water, repeated every four or three hours, and retained. A compound lobelia pill every second or third hour, with the diffusive drops, or with a tea of spearmint and ginger, will be excellent treatment, and will be of benefit to the breathing. The pills of assafætida may be used in the same

conditions; or pills of motherwort extract stiffened with prickly-ash.

After the patient has been relieved of the paroxysm and of the liability to its present recurrence, steps must be taken to regulate the tone of the nervous and digestive apparatus, and thus remove the hysterical susceptibility. And here a great deal depends upon the patient herself, who must be instructed to exert all her mental and moral force in restraining her excitability; in compelling herself to move, talk, and think, in moderation, and not too rapidly; and in controlling her feelings and emotions, and guarding against starting and feeling frightened at every noise and sight. The food must be plain and light, and used in moderation; the mind should be averted from its cares by a suitable intercourse with cheerful but not exciting society; moderate physical labor, and out-door recreation, are daily necessities.

These things being regulated, the female tonic then becomes a most appropriate compound; but the mother's cordial may be used in cases with uterine pains and a weak back, or for parturient women; and the woman's friend may be given in very feeble digestion. A good nervine tonic may be made by infusing in a quart of sweet wine, an ounce each of lady-slipper, ginseng, and scullcap. The liver pills may be given at night, or else a suitable dose of black root, so as to secure one free motion of the bowels the next morning. Headache, difficulty of breathing, and pains in the abdomen, may be relieved by a compound lobelia pill once in

three or four hours, or the pills of assafætida; or by the antispasmodic mixture, or diffusive drods as required. The skin should be kept in good condition by a bath once or twice a week, and the bath should generally be eool, or a little below the temperature of the patient's skin, and followed by good friction. In some eases, light hysterical agitations (not fits) are greatly provoked by a very cold and sluggish condition of the stomach; and nothing will remove this, at times, except a thorough emetic of lobelia with composition. In such cases, the woman's friend is the most fitting tonie; and a cold surface, small pulse, and general laxity of the tissues, will need cold composition tea as a drink at meals, and very little lobelia in any form. Most all eases recover a sound tone of the nervous system very slowly. The existence of menstrual derangements, or leucorrhea, must be met by the appropriate treatment elsewhere detailed.

It may here be remarked, that the present habits of society tend very greatly to develope the hysterical susceptibility in girls; and if parents could always be induced to cease pampering their daughters upon stimulating food, indulging them in light reading and indolent habits, allowing them to keep late hours and oppress the vital organs with improper dress, the world would see very few cases of hysteria, or any other of the forms of nervousness which are now so common as to be considered "fashionable."

### NEURALGIC RHEUMATISM OF THE WOMB.

The womb is subject to an affection of its nerves which provokes paroxysms of pain, and leaves the organ painful and sensitive between the more acute attacks. It is properly a form of neuralgic rheumatism. It resembles the neuralgic form of painful menstruation; but in this latter malady, the suffering is peculiarly periodical, and abates on the appearance of the menses, but in rheumatism the pains and tenderness are nearly continuous, and the paroxysms of aggravation do not occur with any regularity—though likely to be most severe about the menstrual period.

Symptoms.—Pain in the lower part of the abdomen, and in the loins, is the prominent feature. Mental excitement or bodily exertion may aggravate the pain, and provoke the most extreme suffering for many hours, or even for days. It is generally accompanied by a sense of heat, fullness, heaviness, and bearing down, through the lower part of the pelvis; and there may be a constant and painful desire to pass water, and even to move the bowels. Pressure above the pubes reveals tenderness of the womb, and sometimes the least touch of the abdomen eauses suffering; and the vagina may also be irritable, and the mouth and neek of the uterus quite sensitive. This state of things is nearly constant; the pains sometimes abate suddenly, and after a time return as suddenly; they may also shift from place to place in the uterus, and do not always present themselves at the one point. In most instanees, the patient seems never to be entirely free from pain; and the quickness with which it may be provoked by walking or other bodily exertion, inclines these patients to habits of sedentary idleness which are very injurious to the general health. It may oceur in females who have no rheumatic difficulty elsewhere; but those who are subjects of rheumatism and neuralgia, are most liable to this affection of the uterus. It eauses no displacement or inflammation of the organ, nor leucorrhea. It may be distinguished from inflammation by the lightness of the constitutional symptoms; and by the facts that a continued steady pressure generally relieves neuralgia but increases the suffering of inflammation, and that neuralgia continued for months will not destroy the organ as will inflammation.

The causes seem to be a constitutional rheumatic or neuralgic tendency; and this may be developed in the uterus by the contraction of cold, sudden suppressions of the menses, undue sexual indulgence, heavy labor during menstruation or too soon after delivery, too strong injections of astringents to the vagina, and sometimes such jolting exertions as journeying and dancing carried to excess.

Treatment.—During a paroxysm, the patient must lie perfectly still, and take measures to induce a perspiration. The diaphoretic mixture may be used freely; with a compound lobelia pill once an hour, or two hours. Or the pills may be used, and the following tea drank: four parts of white root, one part of ginger, and half a part of black-cohush; a heaped tablespoonful of the mixture to a pint of hot

water, and from four to six tablespoonsful given warm every half hour. A tea of two parts each pennyroyal and feverfew, and one part prickly-ash (or ginger), may be used freely. While thus employing the tea and pills, bathe the lower part of the abdomen with the rheumatic liniment once in four or three hours; if the feet are cool, bathe them in hot pepper or mustard water, and put a hot brick at them; and once in four hours or less, give to the bowel an injection of a heaped teaspoonful of the following mixture in three ounces of elm or starch water: equal parts of lady-slipper, scullcap, and black-cohush. If all three of these are not at hand, use such of them as are; or an infusion of eatnip, spearmint, boneset, camomile flowers, or feverfew, may be used instead. If the bowels have not been moved lately, give the liver pills. In most instances, strict quiet and a few injections will relieve the attack.

Between the paroxysms, the patient may use the following: yellow poplar, two ounces; cramp bark (or motherwort), one ounce; black-cohush and prickly-ash bark, each half an ounce; steeped in a quart of wine. Dose, a tablespoonful three times a day. Half an ounce of black-cohush steeped in a pint of the female tonic, will also be good. The bowels should be kept regular by leptandrin, or the liver pills. A slight increase of the pain at any time, may be met by one or more of the injections above mentioned. The rheumatic liniment should be applied to the lower abdomen morning and evening. The diet should be light; the patient should

go abroad, even if earried; and coitus must be earefully abstained from.

# INFLAMMATION OF THE WOMB.

Inflammation of the womb occurring at child-bearing, is called child-bed fever, and will be spoken of clsewhere. Simple inflammations may arise from a great variety of causes, among which are the following: sudden suppression of the menses by exposure, iced drinks, etc.; the use of strong articles to force the menses or procure abortion; fatiguing walks; violent horseback or other riding; excessive dancing, especially if followed by sudden checks to perspiration; irritating injections; harsh purgatives, especially aloes; excessive marital indulgences; masturbation; the use of pessaries, etc. Blows on the lower abdomen, and violent enjoyments after marriage, are among the common causes. It is divided into acute and chronic forms.

I. Acute Form.—Symptoms.—Acute attacks begin with chilliness; followed by feverishness, heat, and uneasiness through the pelvis; and pain in the lower abdomen and back, extending to the groins and down the thighs. These symptoms may be only light; or they may become very severe, and lead to marked disturbance through the whole body. The womb itself sinks in the pelvis, swells, and becomes tender; and its mouth is opened, and the neck of it sensitive. The pulse is quickened, though the general fever is light. The vagina feels hot and painful; there is pain in the neck of the bladder, with scantiness of urine, yet a frequent and painful

desire to pass water; movements of the bowels are also painful; there are nausea, perhaps vomiting, and loss of appetite; the breasts at times swell, and are painful; and there are thirst and constipation. Coughing, sneezing, and pressure on the lower abdomen, increase the pain in the uterus and groins. The tongue is usually furred and dry; headache may be expected early; the stomach gets very irritable; the patient feels faint on assuming a sitting posture; and very bad cases may give slight delirium. It seldom proves fatal, except when provoked by violence, or the use of improper agents in attempting to procure abortion; and then it may end in abscesses, softening, or mortification.

In light cases, simple congestion may occur, without actual inflammation. The womb is then crowded with blood; the pains through the pelvis resemble colic; uneasy and heavy sensations are complained of at the anus and the neck of the bladder; and pressure on the lower abdomen does not increase the suffering. The other symptoms are the same as in inflammation, but of a milder character.

Treatment.—The amount of medicines used, will depend entirely upon the severity of the symptoms. All patients should lie down; keep still; and be covered lightly, yet so as to keep moderately warm. The room should be kept evenly warm, in winter. Mild cases will generally yield by keeping hot bricks or irons at the feet, using a tea of the diaphoretic mixture, moving the bowels with a dose of leptandrin, and bathing the abdomen twice a day with smart-weed, red-pepper, or other stimulating

wash. In severe eases, heated bricks should be wrapped in dampened cloths, and placed at the feet and each side of the hips; and the diaphoretic mixture given every fifteen minutes, to secure a good sweat. If the menses have been cheeked while in flow, add one-fourth part of eamomile flowers, or a smaller quantity of smart-weed, to the diaphoretic mixture. If the stomach is very irritable, use no smart-weed; but add a little spearmint or eatnip to the mixture, make the tea weak, and give but a tablespoonful every ten minutes till the stomach gets so quieted that it can bear larger doses. Give an injection as follows: white root, two parts; boneset one part; lobelia and elm powder, each half a part; a teaspoonful of the mixture in half a cup of lukewarm water. This injection may be repeated every four, three, or two hours, and retained. Bathe the abdomen with a strong, hot tea of smart-weed, mustard, or pepper, or with the rheumatic liniment, every three hours; and keep on flannels wrung from very hot water, and changed every few minutes. A fomentation of smart-weed and eatnip (or hoarhound), is good upon the bowels; but should not be made too heavy, and should be renewed before it gets cool. A dose of leptandrin should be given every four hours, till the bowels move; but no stimulating physic is allowable. The patient may drink very weak spearmint, eatnip, balm, or sage tea, warm; but no cold drinks are to be used. When the skin keeps persistently hot and dry, a tepid sponge-bath should be given once or twice a day, using light friction after it.

When relief has been obtained, the same measures may be used in moderation, to suit the case. A furred tongue, obstinate headache, and especially a tendency to wandering of the mind, will require an emetic, as elsewhere directed for child-bed fever. The patient must be watched very closely during convalescence; allowed only the lightest and most soothing forms of food; and have the skin kept soft by a moderate use of the above teas and enemas, and the bowels gently moved by leptandrin.

II. CHRONIC FORM .- Symptoms .- Chronic inflammation gives all the prominent symptoms of the acute form, but in a much milder degree. Mental dejection, occasional flitting pains through the womb and groins, difficulty, or even distress, in voiding urine and feces, pressing pain at the neck of the bladder, with weakness in the back, and some light dragging sensations in the pelvis, are the most constant complainings. Falling of the womb may be suspected, and yet none be found to exist; the patient becomes melancholy, fretful, whimsical, nervous, and finally hysterical. There may also, in bad cases, be derangements of digestion, nervous pains in the head, palpitation of the heart, pains in the breast, great sense of oppression, cramps, and restlessness -all coming and going in the most irregular and unaccountable manner. There is usually some derangement of the menses; but the fact of the symptoms continuing between the menstrual periods, shows that it is not a simple disease of this function. These sufferings often pass by unrelieved, with their nature quite misunderstood; and for lack of caring

for herself in time, or consulting freely with a reliable physician, many women allow a chronic inflammation of the womb to bring about grave diseases.

All the causes of an acute inflammation, may, by continuance or repetition, develope a chronic case. To them may be added, tight dressing and too frequent child-bearing.

Treatment.—These cases require a great deal of perseverance in treatment, for they recover slowly. Put the patient on a plain and rather succulent diet; relieve her from all heavy labor, or other source of fatigue; secure some out-door recreation; and absolutely prohibit sexual intercourse. Then she should take a tepid sponge-bath twice a week in warm weather, and once a week in cool weather; and follow each bath by brisk friction. Also use the rheumatic liniment along the lower part of the spine, and over the lower abdomen, night and morning. Keep the liver and bowels in gentle action by suitable portions of black root, or of the laxative pills, aided by a large injection of boneset tea in the morning, if necessary; but allow no harsh cathartic nor free purging. If there is much pain, use as required (once a day or oftener) one of the nervine injections directed elsewhere for neuralgic rheumatism of the womb. Elm bark and peach leaves, in tea, make a very good injection to the bowels; and may also be used as an injection to the vagina two or three times a day. If the case is obstinate, a slow and gentle vapor-bath may be given once in eight or ten days, till the skin becomes warm and pliant. The patient may also use the following;

burdock seeds (or root), two parts; white root, one part; black-cohush, half a part; a heaped table-spoonful of the mixture to a half pint of hot water, and two tablespoonsful used cold once an hour. If the menses are too free, use lady-slipper instead of black-cohush. A tea of spearmint, or cleavers, or elm bark, may be used rather freely and constantly, if the bladder is painful. If there is a little fever-ishness at times through the day, the diaphoretic mixture may be used every half hour, till it is relieved.

After the sensitiveness has been relieved, the burdock drink may be omitted, and the patient put upon the following: yellow-poplar, agrimony, solomon-seal, equal parts; a large tablespoonful of, the mixture to a cup of hot water, sweetened if desired, and two tablespoonsful used cold every second hour. Preparations on liquor should be avoided; but the ingredients of the mother's cordial may be formed into a decoction or sirup, and used; and so may those of which the wine of comfrey is compounded—omitting the camomile if the menses are too free. Keep up the sponge-baths, laxative pills, and nervine injections moderately, but steadily. Six months or more may be required to effect a cure.

#### ULCERATION.

The neck of the womb is many times ulcerated, and gives much trouble. The parts are first congested; and may give a sense of fullness, uneasiness, and tenderness (especially on coitus), for weeks or months before the ulceration commences. A light

inflammation precedes the formation of sores; and while it lasts, the patient may suffer occasional shiverings followed by heat, weight and dull achingpains in the lower part of the pelvis, and itching of the external genital organs. The ulceration itself is but superficial, and mostly in spots, about the mouth of the womb; progresses slowly; is accompanied by increased weight and dull pains in the parts; soon gives a leucorrheal discharge, commonly mixed with some pus and occasionally streaked with blood; and causes sharp and prostrating pain upon sexual intercourse. Such ulcers are very annoying, may continue for an indefinite period, and finally are liable to beget strong nervous symptoms and to undermine the health considerably. Chronic inflammation of the womb accompanies ulceration of its neck, sometimes.

Ulceration is generally caused by some local irritation, one of the most common of which is excesses in marital indulgence. The wearing of pessaries, the untimely use of strong astringent injections, masturbation, and sudden suppression of the menses from exposure, are also among the causes.

Treatment.—The approach of this malady is often so insidious, that the woman is apt to let it become settled before taking the necessary steps to remedy it. The better plan is, to meet it promptly at its first appearance, for then it may be remedied with ease; but when it has once become settled, it is difficult of removal. Married women must rigidly deny all cohabitation. If there are heat, weight and tenderness in the parts, use a tepid hip-bath for ten or

twenty minutes once a day; keep the bowels open with the laxative pills, or leptandrin; and syringe the vagina twice or three times a day with a tea of elm and a very little lobelia. Three parts of powdered elm and two of lobelia, may be given as an injection to the bowels two or three times a day—an even teaspoonful of the combined powders in a gill of tepid water, and retained in the bowel. Use all injections lukewarm.

When all inflammatory symptoms have passed away, the injections to the vagina must be moderately tonic and astringent. An infusion of one part each beth-root, yellow-poplar, and lady-slipper, is good; or golden-seal may be used instead of the poplar, and witch-hazle or raspberry for the beth-root. Dogwood bark, golden-seal, and scullcap, in equal parts, make a good injection; and so do aspen (or white poplar) bark, and cherry bark. At the same time keep the bowels open by the laxative or the liver pills; and sustain the stomach, and improve the strength, by using the female tonic, spiced bitters, or some similar preparation.

Ulceration sometimes becomes very obstinate, and should be submitted in good season to a physician of judgment and carefulness.

# PROLAPSUS OR FALLING OF THE WOMB.

The situation of the womb, and its means of support by four soft ligaments, make the organ very movable in its position. In consequence, it is very liable to displacements, among the most common of which is falling or prolapsus. All classes of females

are liable to it; but the sedentary, luxurious, scrofulous, and those of lymphatic-nervous temperament, are the most common sufferers. It oftenest afflicts married women who have borne children, and about the middle period of their lives; but those who have borne no children, and the unmarried, do not escape; and in rare eases it has appeared before menstruation, or has not occurred till after the cessation of the menses. The degree of displacement presents the greatest differences, in some cases being a mere trifle, in others descending almost to the external parts, and in rare cases protruding into the world from half an inch to an inch or more.

Causes.—The womb does not fall from its position, till the parts that sustain it have first become weak. These parts are of several distinct classes, as follows: 1st. The broad and round ligaments, called also the suspensory ligaments, which have been elsewhere described. 2nd. The vagina, and the muscles which form the floor of the pelvis, which by their firmness (when in health) serve to support the weight of the pelvic and abdominal viscera. This class ineludes the museles connected with the rectum. The walls of the abdomen, the natural firmness of which serves to hold up the abdominal viseera, and thus prevents these from falling heavily upon the uterine organs. Probably the great majority of these eases result from weakness of the second of the above elasses of organs; but any two, or all three, classes may be more or less concerned. When it is remembered that by every breath, upon coughing and sneezing, and by each effort at stool, the

bowels and other viscera of the abdomen are forced down upon the bladder and uterus, it will at once be seen that these latter organs can not escape displacement unless all the parts supporting them, and the parts whose contractile power serves to relieve them from the burden of the upper viscera, are in good health.

Relaxation of the above parts, therefore, are the direct or immediate causes of prolapsus; but whatever influences serve to weaken and relax those parts, are the remote or first causes of falling of the womb. These first causes are very numerous; and sometimes are of such long-continuance, and act upon parts so remote from the uterus, as often to be overlooked as not being connected with this malady. It may safely be said that any habit, course of life, accident, or injury, which will impair the vigor of a woman's health and the elasticity of her constitution, may finally result in that relaxation which begets prolapsus. Among these may be enumerated all those artificial habits of what is called "good society," under which girls grow up in-doors and under tight dresses, and are allowed none of that sunshine, out-door romping, freedom from physical restraint, and daily labor, which are so necessary to health and vigor. An eminent medical writer has penned the following truthful sentences upon this subject; and if mothers would mark and profit by his statements, and bring up their daughters in the manner that such facts will suggest as the only rational one, no one could compute the disease and misery which would thereby be saved.

"The mania that exists for precocious education and early marriage, causes the years that nature designed for the development of a strong body and a vigorous mind, to be wasted in the restraints of dress and the exhaustions of the school-room and ballroom. With a body not half elothed, and a mind intent on pleasure, the hours designed for sleep are expended on the midnight revel. A round of sentimental reading, wastes the powers of the brain as fast as they are formed; and the excitements kept up upon the imagination, with the development of a morbid sensitiveness, absolutely forbid all hope of a sound and strong condition of the nervous system. The restraints of fashionable dress, and fashionable idleness, and fashionable repugnance to sunshine and labor, absolutely forbid that free exercise, and that expansion of the frame, which are absolutely indispensable to the attainment of good physical strength. After coming up in this manner, and as soon as possible after reaching the age of puberty, the poor girl (all relaxed, nervous and excited) is hurried into an early marriage; and a premature confinement caps the climax of her misery, and brings her to the entrance of a life of suffering.

"The barbarous corset is a powerful cause of producing the disease. It presses the bowels directly down upon the uterus, and prevents a proper and healthful circulation of blood in the lungs; and by thus reducing the general health, causes congestion and leucorrhea. Frequent abortion is likewise a fertile cause; and so is dancing. Nothing is more common than this malady among the operatives in

mills and manufactories, or those who work at any occupation that shuts out the fresh air, overworks the body, and constrains the frame into awkward positions."

Early marriage is quite sure to bring on prolapsus, leucorrhea, and other grave uterine maladieseven though early child-bearing may not follow. Excessive amorous indulgences I am inclined to place as almost the first in the list of causes; certain it is that all females are thereby much more decidedly exhausted than either themselves or their husbands are likely to suppose. Among the other most prominent causes of prolapsus are, too frequent child-bearing; much labor, walking or standing during pregnancy; working or being on the feet too soon after delivery or abortion; ill-management, and especially the use of instruments, and the employment of pulling or other force, during child-birth; wearing the clothing too tight, even without corsets; jumping, running, dancing, and similar jolting motions, especially about the menstrual period. A chronic lencorrhea, by relaxing the walls of the vagina, strongly disposes to prolapsus. Any protracted disease, that greatly prostrates the frame, may lead to it. An impoverishing diet and low situations, are sometimes its developing causes. Women may also do their uterine organs an injury, by acquiring the habit of holding the urine and retaining the feces too long. Strong and stimulating purgatives often work great mischief by their influence from the lower bowel to the womb.

Symptoms.—The symptoms of this malady pre-

sent much diversity—owing in part to the great differences of sensibility in patients; and in part to the varying degrees of the prolapsus, and of the maladies or conditions with which it is connected. Some ladies suffer quite sharp misery upon a trifling displacement of the organs; while others will be afflicted with an approach to a perfect prolapsus, and yet not suffer much severe pain. In all cases, however, the health is surely undermined in time; the malady is one in which recovery need not be hoped for without medication; and its gradual advancement may finally confine the woman to her bed, and render her in nearly all respects helpless. Women of sensitive frames, and of tender nurture, suffer most severely from slight disturbances.

In mild cases, when the uterus is depressed but an inch or two in the vagina, the most customary symptoms are: dragging and weighty feeling in the sides and groins, dull pains in the loins, sense of weight about the fundament; and an increase of all these feelings, and a more or less distinct bearingdown sensation, when the patient is much upon her feet. There are also aching, pain, and weakness in the back. When the prolapsus is greater—the womb descending to the bottom of the vagina, or almost to the vulva-all these feelings are much aggravated. There are severe pains in the groins, lower part of the abdomen, and small of the back; and these continue most of the time. There is a distinct sense of weight, and of a bulging pressure downward, within the vagina; and this is greatly increased on walking, and is usually accompanied with a feeling of profound weekness, and a heavy dragging sensation in the small of the back. The pressure of the uterus upon the bladder and rectum, soon causes difficulty in passing water, and induces costiveness. Sometimes patients in this condition can not void urine, till they have lain down so as to move the uterus from the neck of the bladder. When this degree of prolapse occurs very suddenly, it is likely to induce faintings, nausea, vomitings, exeruciating pains in the entire pelvis, and even flooding. Even the lighter grade of prolapsus, occurring suddenly in a sensitive and delicate woman, may induce this same class of symptoms; but such symptoms never follow any degree of the malady, when it comes on slowly.

When the prolapse is complete, the uterus hangs below the external parts, between the thighs; and drags down portions of the vagina and bladder with it. It seldom falls to this extent suddenly; but when it does, the patient suffers to an alarming degree the symptoms caused by a sudden prolapse to the bottom of the vagina. When perfect prolapsus advances slowly, costiveness and difficulty of urination, in some cases disappear; but the pains and bearing-down sensations are greatly aggravated, and there may be a feeling of numbness (or even of paralysis) in the back and thighs. The protruding organ becomes swollen and exceriated, and finally ulcerated; a constant acrimonious discharge is very offensive, and also irritating to the thighs; and neuralgic paroxysms, copious hemorrhage, and dribbling of urine, may be suffered.

The descent of the uterus can be detected readily by introducing the finger into the vagina, when the organ is met as a firm mass; round at the extremity, in which the opening or mouth is felt; and moving up easily before pressure, but at once falling again. The mouth inclines more or less backward. If the organ protrudes into the world, it presents a darkred appearance and a firm texture—its firmness distinguishing it from a prolapse of the vagina.

All portions of the frame suffer more or less from sympathy with a prolapsed womb; and even a light degree of this displacement is apt to make itself felt, through the nervous system, upon various parts of the body. Weakness, uneasiness, and sense of weight, in the small of the back, are among the earliest of these sensations; but may not excite any suspicion of prolapse till they increase both in severity and constancy, and have associated with them loss of appetite, siekenings at the stomach, flatulenee, and constipation. These latter symptoms may become so severe as greatly to interfere with the nourishment of the body, lead to marked indigestion, tormenting wind in the stomach and bowels, and emaciation. The nervous system suffers in varying degrees, from "nervousness" to hysteria; the mind is depressed; walking and standing inerease the suffering, and hence are avoided, and the patient has the effects of sedentary habits added to her former troubles. Under such an accumulation of sufferings and depressions, life becomes very irksome; and though all women with prolapsus may not suffer the fullest degree of these symptoms, none

ean hope to escape a most burdensome portion of them.

The menses may continue quite regular under severe prolapsus; and their disturbance is rather the exception than the rule. Profuseness of flow is the most common form of derangement that occurs. Leucorrhea is an early trouble, and may become very profuse. Conception is possible, even in bad cases.

Treatment.—All those influences which have been enumerated as causes of prolapsus, must be carefully and positively avoided; for it is useless to attempt the cure of so obstinate a malady, while the circumstances which produced it are allowed to operate either wholly or in part. And if a lady once attempts treatment for this difficulty, it should be with the conviction that a cure can be effected only by very gradual processes; that many months will of necessity be required to restore health, even in moderate eases, if they have been of a few months standing; that in light eases occurring suddenly, the organs may be restored to their former tone only after many weeks of sedulous care; and that old and bad eases may require treatment for a year or two. Perseverance in the strictest regulation of all the habits of life, and in the continuance of treatment, is a matter of the first importance. The same remarks would apply with equal force, in the management of any chronic difficulty of the female organs; but seem especially to be needed in connection with falling of the womb-the common result to which so many other maladies tend, and

nearly the most obstinate and exhaustive of them all. Many a woman fails to get well of prolapsus, either by neglecting to keep persistently guarded against its causes, or by impatiently shifting from one course of treatment to another, or by dropping all treatment just as hopeful progress is being made but before a thorough cure has been effected.

In cases which have occurred suddenly, the patient must lie down upon her back; and maintain that position as steadily as possible, till fully relieved from all acute suffering. If the organ has unfortunately protruded, it should be returned within the vagina as soon as can bc. This is effected by smearing the parts with sweet-oil or lard, and then (having the hand also oiled) gently but steadily pushing the organ upward. The movement may be aided by lifting up the patient's knees, and carrying the heels toward the nates, as she lies upon her back. If she have fainted, let all the clothing about the neck and waist be loosened a little, cold water dashed at intervals into the face, and smelling salts or hartshorn placed an inch or more below the nose. If she is not unconscious, but inclined to faint, give from five to twenty drops of the third preparation of lobelia in a teaspoonful or more of cold water; and repeat every ten minutes or oftener. The diffusive drops, or a pretty strong tea of ginger, may be used for the same purpose; and strong vinegar may be smelled of, though the too popular camphor is worse than useless. The faintness must not delay the immediate, but tender, efforts to restore the womb to its position.

If the organ have been protruded for some hours, it will swell; and then it may be difficult to restore it to its place-especially if about the whole body of it have protruded beyond the vagina. Before attempting its return, the bladder and bowels should be emptied; and if the patient can not do this voluntarily, the water should be drawn away by a catheter, and the bowels moved by a large injection of elm and boneset. If the organ can not then be replaced by oiling and gentle pressure, the patient must be kept upon the back with the pelvis a little raised; inject into the bowel a teaspoonful of combined powders of elm, lobelia and boneset, in tepid water, once in three or two hours; and apply large poultices of elm and lobelia to the protruding womb, till its swelling and sensitiveness have been reduced. A few hours may be required to effect this; but there is no danger in waiting, while there would be much in using too great force in attempting to replace the swollen and tender organ. If the patient feel prostrated or greatly agitated during this interval, the third preparation of lobelia, or the diffusive drops, may be used as required.

Complete prolapsus may take place early in pregnancy. Its reduction is to be effected by the same measures as at other times, but with the greatest earefulness. It has sometimes occurred that the organ has fallen partially beyond the vulva, in the advanced stages of pregnancy; and then it may be impossible, at times, to restore it till after the birth of the child.

After returning a prolapsed uterus, steps must be

taken to keep it as nearly in its place as possible. The patient should rest on the bed for such length of time as may be necessary to overcome the tendency to an immediate return of the prolapse. In some cases, this may be for but a few days, while weeks may be required in other cases. But it is always objectionable to keep a patient thus confined to her bed for months, under the impression that this position will effect a cure; for the general health will fail under such confinement, and thereby the object of this treatment will be defeated. If the patient can not assume the crect position without danger, she must frequently be carried short distances out of doors. The walls of the vagina may at the same time be strengthened by suitable injections, among the best of which are, cold water, and cold tea of raspberry, witch-hazle, beth-root, dogwood bark, or similar mild astringents and tonics, used pretty abundantly night and morning. Astringent teas should not be made too strong at any time, and especially must be used weak after returning a prolapsed uterus; and they should always be thrown into the vagina carefully and slowly, and not used too cold.

The treatment of all cases, whether the womb has or has not protruded (and by far the greatest number of cases never reach the vulva), must embrace means to sustain the digestion, the action of the liver and bowels, and the general strength; and also to improve the tone and elasticity of all the parts concerned in sustaining the womb. For general tonic purposes, about the same course must be pur-

sued as in leucorrhea. The female tonic is good for all cases in which the patient is sensitive and nervous, or shows signs of hysteria. In old eases, if the system is much depressed, the woman's friend or the spiced bitters may be used; or if the system get accustomed to one preparation, or one set of tonics, others may be used as desired-observing the one common object of bracing up the digestive apparatus with innocent vegetable remedies. The efficacy of all the rest of the treatment, will depend much upon the persistency of this. The obstinate eostiveness may be relieved by the laxative pills; or by leptandrin, butternut bark in sirup, the liver pills in bad eases, or using some wahoo or gray-ash in the tonic preparation (half an ounce or an ounce to a pint). Strong and stimulating purges must on no account be used; and as the system becomes accustomed to one laxative, another should be employed. The use of a tonic and laxative injection each morning, will be of much benefit both to the bowels and womb; and eool water, a very little salt in water, a tea of four parts boneset and one of ginger, are all good for such injections. The use of some cold composition tea at intervals through the day, will also be an advantage to the system by sustaining the circulation and keeping warmth toward the surface; and the same purpose will be greatly aided by a bath, twice a week, of cool (not cold) water, followed by brisk and thorough friction. is a measure which must not be neglected.

In some chronic and obstinate eases, the stomach gets very cold and sluggish; and becomes such a

reacting burden upon the womb, that no benefit can be obtained from any treatment, till a good stimulating emetic has been given. Some eases fail to be cured, by neglecting or refusing to use this measure. The need of an emetic is here generally indicated by feelings of great depression, oppression at the stomach, heavy and nearly constant coat upon the tongue, or a peculiarly clear and dull-red tongue, and alternate sensations of clammy coldness and dry heat. An emetic may be repeated once in two or three weeks, till these feelings yield. It is well to discontinue them as soon as possible. A woman may feel a slight sense of bearing-down for a little time after an emetic; but this presently gives way to a feeling of decided relief.

If the urine is scanty and voided with difficulty, half an ounce of queen-of-meadow, or root of dwarf-elder, may be added to a pint of such tonic preparation as may be in use. When the womb is situated very low, its position against the neck of the bladder may be the sole cause of difficulty in urination, or may absolutely stop its discharge. This may be relieved, and the bladder emptied, by passing the finger into the vagina, just behind the puble bones, and steadily pressing the womb backward toward the spine.

While thus taking efficient measures from improving the general health, local appliances must be used to strengthen the parts. Among the best of these, are injections to the vagina of tonic and astringent articles. The power of these must depend upon the state of the tissues—irritable cases re-

quiring mild articles; chronic cases, with great laxity of the parts, needing much stronger agents; and cases of unwonted weakness and insensibility requiring even stimulants for a time. The milder astringents are raspberry, chestnut leaves, bethroot, witch-hazel, beech bark, geranium or cranesbill, and oak leaves; and tonics suitable to use with them are wild-eherry bark, aspen-poplar, and goldenseal. Stronger astringents are hemlock-bark, hardhack, alum root, and oak bark; and the stronger astringent tonics are dogwood bark, and bark of redwillow. The stronger astringents should always be used cautiously, and in moderate quantities; for, while some degenerate cases will need them, their imprudent use is liable to injure the organs by too powerfully astringing them. Better use a mild astringent and a stronger astringent tonic, than to resort immoderately to the powerful astringents. A little tineture of myrrh is a good addition in very bad cases, especially if the parts are quite insensitive or the discharge is fetid. A teaspoonful or more of hot-drops to a pint of any suitable infusion, is needed in some very bad eases of the latter kind. The injections to the vagina should be used cool, and repeated twice or three times a day; and the woman should lie upon her back, and inject them slowly, and allow the fluid to remain in the vagina as long as convenient.

Some patients are much improved by wearing a wet girdle for a few hours each day. This consists of a towel, or two or more layers of heavy muslin, folded about six inches wide, wrung out of cold

water, and pinned around the body at the lower portion of the back. Over this is pinned a layer or two of dry muslin. And this is worn till it begins to feel too warm to the patient; when it is removed, and the parts it covered are dried with good friction. The girdle is best for recent eases, and those who are irritable and have heat in the back. It is not good for patients who have a cold surface and a chronic prolapsus, (these being often benefitted by stimulating liniment or washes on the lower abdomen). It is usually worn in the afternoon or evening; or may be put on at bed-time, and worn through the night. The same class of patients who are benefitted by the girdle, may find advantage in taking a sitting bath of eool water once a day-employing it about ten minutes, and not having the water to eool.

A mild current of electro-magnetism, employed for twenty or thirty minutes at a time every second or third day, is one of the most valuable of all local measures for this malady. The current may first be passed through the pelvis, from groin to groin—ehanging the poles at short intervals. Then place the negative pole under the back, a little above the "small" of it, and introduce the positive pole into the vagina either by an insulated director or by another person holding it in one hand and passing the finger of the other hand into the vagina. The current may be continued in this direction about fifteen minutes; and then the positive pole should be placed to the back, and the negative to the feet, and the current passed thus for five minutes. The poles,

when applied to the surface, should be wrapped in a piece of wet muslin. Added to the other measures, this use of electricity will be found of eminent value.

Mechanical inventions are sometimes employed in sustaining the uterus in position, such as pessaries and abdominal supporters or trusses. Pessaries are designed to be placed within the vagina, and, by distending the walls of this passage a little, there to be lodged and form a resting place for the womb. They are made of rubber, wood, horn, bone and glass; and are either spherical, or a flattened eircular, or oval. The flattened ones, with a small hole in the centre, are best; and the size selected should be such as will distend the vagina just enough to keep itself held at the point where it is placed-being neither so large as to cause annoyance, nor so small as to slip downward. A very good kind, ealled the "stem" pessary, eonsists of an oblong solid piece sitting upon a metal stem; the stem extending beyoud the genitals, and attached to metal arms which rise in front of and behind the pelvis, where it may be retained in any desired position by bands around the body. The pessary is inserted by oiling it and then, having emptied the bowels and bladder, the patient is to lie upon her left side, elevate the knees toward the abdomen and separate them by a pillow, and insert the instrument by eareful and steady movements. It should be passed far enough inward to lift the womb up to an easy position; and should lie erosswise of the vagina, so that the mouth of the womb may rest upon the opening in the pessary.

It is best always to wear a napkin, on first using the pessary. The stem pessary is both the most easily inserted and the most easily removed.

No pessary should be worn at night, and is not proper at any time when the patient is keeping her bed. Virgins should not use them, except under the most absolute necessity. Before introducing them, each morning, the bladder and bowels should be evacuated; and the vagina syringed with weak eastile soap water, and then with the medicated injection; and the same should be done after removing the instrument at night. No pessary should be worn during, nor just before or after, the menstrual period; nor when its presence causes tenderness or heat. At best, this instrument is merely palliative and never curative; in some patients with relaxed tissues, who insist on keeping upon their feet, it often affords relief for the time; but in recent eases and sensitive females, it provokes irritation, and will generally do more harm than good. It is a popular error to expect much improvement under the use of the instrument—which should be resorted to only as a temporary necessity, and avoided as much as possible.

The abdominal supporter is designed to hold up the bowels and other viseera, and thus relieve the womb from their weight. It should be pretty broad in front, and worn with its lower edge just above the pubic bones. It can do good only in females with corpulent abdomens; but can serve no other purpose than harm to women with flat abdomens—for in such it can not be applied so as to lift up the

abdominal viscera, but must always press upon the womb and force it still lower.

While rest and quiet are necessary to all these patients, they are particularly so about the menstrual period; and every woman with even a moderate prolapsus, should positively keep to the lounge or easy chair from a couple of days before the flow till a few days after its cessation. If the menstrual periods are painful, they must be managed as elsewhere directed for that difficulty; and hemorrhages, or an excess of the catamenial discharge, is to be met by the means suitable for profuse menstruation. If ulceration occur in connection with prolapsus, the proper steps will at once be learned by reading the chapter upon that affection. Should an inflamed condition of the vagina or womb be developed, no astringent injections must be used till, by the emollient and relaxing treatment detailed in the appropriate chapter, the inflammation has been completely relieved.

By a proper and persevering use of the above measures, the majority of cases of falling of the womb can be cured. Incurable cases do exist, but are extremely rare; and some of them are made by the patient's own improprieties or lack of perseverence; while many that had been pronounced incurable, and as such had been given over for years, have ultimately been restored by a judicious and persistent use of the above measures. The complication of a prolapsed womb with a polypus, or tumor, a stone in the bladder, dropsy, cancer of the womb, general marasmus, etc., makes a case in which the

best skill of the highly-educated and experienced physician will be required; and indeed in no case should a woman attempt to treat herself for this malady without the direction of a judicious medical man, if one can be had conveniently.

#### INVERSION OF THE WOMB.

By inversion of the womb is meant that accident in which the body of the organ falls inward and passes down through the mouth of the organ, thus turning the uterus "inside out." It is, most fortunately, a very rare occurrence. The most common eause is pulling at the cord, and introducing the hand into the womb and pulling at the placenta, when the after-birth remains attached in child-bed -a eruel practice, which has cost many a woman her life. It may also follow very quick deliveriesthe fundus of the uterus and the unloosened plaeenta following the child, before the distended mouth of the organ has time to contract. Violent efforts by the patient to "bear down" in labor, or for the expulsion of the placenta, have also produced inversion; and a short cord, or one twisted around the child, may do the same. Large tumors attached at the fundus, may slowly pass through the mouth of the organ and drag the fundus along. Dropsy of the womb, by greatly weakening, may favor inversion.

Symptoms.—Inversion is the most dangerous of all uterine displacements, especially if the fundus have entirely escaped through the mouth and protruded from the vagina. This degree is called com-

plete. Incomplete inversion may exist as a simple depression of the fundus; or as a bulging of this part into the vagina, but not beyond the external organs. Its occurrence is at once followed by a deadly paleness of the face, sudden sinking, great weakness of the voice, and a small and fluttering pulse. Nausca and vomiting quickly follow; profuse and exhaustive hemorrhage is quite sure to ensue, if it be a case in child-bed; there may also be violent pains in the uterus, and pain and dragging in the loins; and convulsions have sometimes arisen. The prostration of the patient is sudden and extreme, and life may be lost in a few hours; yet in some rare cases, an inverted uterus has been restored after complete protrusion for six or more days, and life ultimately saved. Of course the symptoms in a case following uterine dropsy or polypus, are less severe and sudden than those which belong to acute cases.

The inverted organ is globular, rough, and bleeding; and the mouth can not be felt. When it can be seen, it looks red at first; but presently becomes dull-red, and finally brown. The circulation in it is strangulated; and death by mortification is imminent, if the organ be not soon returned to its place.

Treatment.—If the placenta is attached and protruding, it is generally necessary to remove it by careful separation with the fingers from its edges toward the centre. Reduction of the organ may be impossible, till this is done; but if the placenta adhere pretty firmly, it is best first to try and restore the womb without detaching the after-birth, and in-

terfere with the latter only when it must be done. Time is precious, and the steps taken must be taken promptly, yet calmly. With the finger nails closely pared, and the hand well oiled, bring together the ends of the fingers and thumb, so as to form a cone. With the point of this cone, make steady and gradually increasing pressure upward upon the centre of the protruding mass. While doing this, let the woman lie upon her back, with the knees far apart and lifted well upward; and her strength may be saved by giving from five to twenty drops of the third preparation of lobelia every few minutes. If there is much nausea or vomiting, it may be impossible to give any medicine; though a very weak tea of two parts spearmint and one of ginger may be well received, in teaspoonful doses. If the organ rise gradually before the pressure, and successfully passes upward through the vagina and through its own mouth, let the hand keep following it, even into the womb as returned to its natural position. And even then, the hand should not be drawn away too quickly, lest the fundus be again inverted; but should be withdrawn quite slowly, and only as the uterus contracts upon it. If there is continued hemorrhage, and no disposition to uterine contraction, pursue the measures clsewhere directed for flooding.

Steadiness and firmness generally succeed, but harshness may prove directly fatal. If fair force cannot effect reduction, better wait a few hours, and meantime soothe and relax the organ by applications of elm and lobelia, and also give lobelia or the anti-

spasmodic mixture inwardly. Success has sometimes been obtained after waiting a day or two; though this is rare. If reduction is not effected at once, urine will accumulate in the bladder in three or four hours, and must then (if possible) be drawn off by the catheter before renewing the efforts at replacement. The bowels must also be emptied by relaxing cathartic injections, before attempting reduction after a delay of eight or more hours.

Where the inversion is incomplete, the reduction is easily effected, especially after injecting some lobelia and elm tea to the vagina, and also to the bowel. When the fundus has not passed beyond the mouth of the womb, it can be restored by placing the patient in the position before mentioned, raising the pelvis by pillows, and lifting up the depending portion of the organ with the finger.

After reduction, the patient should be kept upon the back, with the hips elevated; and hemorrhage may be met as elsewhere directed for flooding. If the patient is agitated and depressed, the diffusive drops may be used; or a tea of equal parts lady-slipper and beth-root, and one-fourth part ginger, a tablespoonful to a pint of hot water, may be given in doses of one or two tablespoonsful every twenty or thirty minutes. If any inflammation of vagina or womb follow, let it be met as directed for inflammation at other times. If there is no inflammation, but rather leucorrhea and a tendency to prolapsus, use mild astringent injections to the vagina, and such others of the measures for falling of the womb as the case may require. Prolapsus is strongly

probable, after inversion; and such a patient must be extremely careful of her health and strength, and not be in too much haste to sit up or to stand upon the feet.

## FORWARD AND BACKWARD DISPLACEMENTS.

The body or fundus of the womb may fall forward against the pubic bones, the mouth being at the same time thrown back into the hollow of the sacrum. When the womb lies thus crosswise in the vagina, it is termed a forward displacement, or ante-version. On the contrary, the fundus may fall backward into the hollow of the sacrum, and the mouth against the pubes, when it is called a backward displacement, or retroversion. Both accidents are rare; but retroversion is the less common of the two, and may prove very serious if it occur during pregnancy. Neither accident can occur after the fourth month of pregnancy, for the womb is then too much enlarged to turn into such positions.

Causes.—Backward displacement generally occurs from over-fullness of the bladder. When this organ is greatly distended with urine—as may occur during the restraints of company or traveling—it presses the body of the womb strongly backward; and while the uterus is in this position, a sudden step down, a fit of laughing, coughing or sneezing, a fall or blow, or even a too violent and sudden attempt to void the urine, may cause the fundus to pass below the promontory of the sacrum, and make a case of retroversion. Dr. Meigs says: "A jump from a carriage step, or a chair, or a trip on the pavement,

while the womb is pushed backward by the full bladder, may suddenly and even instantly jam the uterus under the promontory of the sacrum. Let a woman two-and-a-half months gone, get into a stage or railear, having neglected to evacuate the bladder beforehand; if she is prevented for some hours from relieving herself, she will hardly reach her journey's end without having retroversion."

A displacement forward is usually preceded by an engorged condition of the womb, and thickening of its walls, together with a relaxed state of the round ligaments. Frequent child-bearing favors this accident; and it is commonly brought on by shocks, violent exertion, severe vomiting, and constipation with large accumulations in the rectum. This is not so grave a difficulty as the displacement backward, and is not so common during pregnancy.

Smyptoms.—When either of these difficulties occurs suddenly, it causes sharp pain through the pelvis and in the perineum, with a sense of fullness and weight, an inclination to bear down, and a frequent desire to urinate and evacuate the bowels—both of which are accomplished with difficulty. The urine may be stopped entirely; and so great is the pressure of the womb upon the neck of the bladder, in some eases, that the eatheter can be introduced only with much trouble. When the displacement is backward, there will be much pain in the sacral portion of the spine; and this will be increased upon motion. If the displacement is forward, there will be pain in the lower abdomen, back, and thighs. The real nature of the case can be determined only by passing

the finger into the vagina; when the womb will present itself sidewise as a smooth and firm tumor, while the mouth of it can be reached with some difficulty either high up in the sacrum or under the pubes. If the fundus of the womb is thrown backward, the back wall of the vagina is loose and the front wall tightened; while a displacement of the fundus forward loosens the front wall of the vagina. It is always important to learn, by examination, the precise position of the fundus and the mouth of the womb.

If the displacement take place slowly, the same general symptoms occur, but in a milder degree. The persistent difficulty in passing water and feces, should excite suspicion, and lead to a careful examination—especially in a pregnant female. If the womb get thus crosswise during pregnancy, and particularly if it get displaced backward, it would be a matter of extreme seriousness to let it go undetected, or neglect to restore it to its true position. The gradual enlargement of the organ natural to the circumstances, would soon make it impossible to lift it above the promontory of the sacrum; and then its daily increase of pressure upon the rectum and bladder would presently interfere so completely with the discharges from these organs, that the bowel would be distended to a most painful degree, and the bladder might fill to bursting. Local inflammation will also ensue; and gangrene may ultimately result, unless the organ be restored, or forcible delivery procured.

Treatment.-In all cases, efforts should first be.

made, by introducing one or two fingers into the vagina, to find the mouth of the womb, hook one finger gently but firmly into the opening, and draw the part down to its proper place. This attempt will be aided by placing the patient upon her back, and lifting the knees to a right angle with the abdomen. If the bladder and bowels have not moved quite recently, they must be emptied before doing anything else. Sometimes it is quite difficult to pass a catheter into the bladder, or to throw an injection into the bowels; but they should be tried with eareful firmness, and the attempt given up only under necessity.

If these steps fail to restore the womb, and the ease be one of forward displacement, advantage may be gained by placing the patient upon her back on the floor, with the limbs lifted up so that the thighs shall rest upon the edge of a low bedstead. By oeeupying this position for fifteen minutes or more, the weight of the bowels is removed from the womb, and the displaced organ will often fall to its proper position; and if it should not, it ean then be the more readily shifted to its place either by drawing down its mouth with the finger, or lifting its fundus up. If the ease be one of displacement backward, place the patient upon her elbows and knees (dropping the shoulders as low as possible, and lifting the pelvis as high as possible), and seek reduction while she is in this position. If the mouth of the uterus is not easily reached, the fundus may more readily be lifted while she is in this position. If these attempts fail in a backward displacement, the

body of the womb may perhaps be reached and pressed upward by introducing one or two fingers into the bowel. When the woman is pregnant, it may become a matter of necessity to pass the entire hand into the rectum. This is an unpleasant resort; but may be effected with safety and success by a skillful physician.

After either of these displacements has been overcome, great eare must be taken lest the weakened structures allow the womb to descend and lead to a permanent prolapsus. By examining the chapter on Falling of the Womb, the course proper to prevent this occurrence will be found. A woman who has once suffered either of these displacements, must ever after be eareful to avoid any condition or influence which would be likely to cause its recurrence.

### PROLAPSE OF THE VAGINA.

The walls of the vagina may "fall," or become prolapsed. This may occur to either the front or back wall, or to both walls at the same time. The prolapse may be partial, in which ease the membranes do not protrude; or it may be complete, when the structures protrude beyond the external organs of generation.

Symptoms.—In partial prolapse, there is a sense of weight and uneasiness in the vagina, some difficulty in passing water and feees, and a soft round mass presents at the mouth of the vagina. In complete prolapse, the weight in the vagina increases to a painful dragging, extending to the small of the back; walking causes soreness and pain; the dis-

turbed position of the bladder may leave it relaxed and thus allow the urine to pass away involuntarily, or prevent it from being discharged at all; and very obstinate eostiveness ensues. An inflamed condition of the structures soon follows; and a profuse leucorrhea, or even a purulent discharge, soon takes place.

Prolapse, of the vagina is readily distinguished from that of the womb, by the protruding mass being of a globular instead of a flattened-oblong form; and by its soft and almost fluetuating feel, instead of the firm and dense feel of the uterus. The accident is a rather rare one, and occurs mostly in persons of lymphatic temperament. A tendency to it is given by severe chronic leueorrhea, frequent childbearing or abortion, excessive coitus, masturbation, abuse of hot bathing and warm or relaxing drinks, violence with instruments during labor, or any form of violence. It is a very troublesome one, but seldom of any serious import; yet when it occurs during labor, it may prove very annoying, or even become grave by leading to some form of lacerationas from the vagina into the bowel, or into the bladder.

Treatment.—The patient should lie down as much as possible. The bowels should be emptied morning and evening by an injection of a little ginger in cold (or cool) starch water; and if the urine do not flow readily, it should be drawn off frequently by the flexible eatheter. If the parts are feverish and irritable, they should be treated with washes of lobelia and elm, till the excitement is relieved. When there

is no special irritation, astringent washes should be used, such as infusions of raspberry, beth-root, witch-hazle, or geranium. Some cases that have stood for some time, may need decoctions of stronger astringents—as hemlock or oak bark—to make a sufficient impression upon the parts. It is usually best to add some tonic to the astringents that are employed, such as cherry bark, aspen-poplar, dogwood bark, or golden-seal. The general health must at the same time be sustained by the use of spiced bitters, or any other suitable combination of tonics. These cases, indeed, need to be managed much as cases of falling of the womb; and sometimes pessaries may be used to advantage, though not always.

In some very severe eases, of long standing, the walls of the vagina may become so weakened that no medication or mechanical appliance will sustain them in place. The prolapse then may impair the general health very much. The only permanent relief that may then be obtained, is in removing a portion of each side of the prolapsed walls. This is an operation for the surgeon; and when a judicious operator advises this procedure, the lady should follow his counsel without any fear of danger or material suffering.

# DISPLACEMENT OF THE BLADDER.

The bladder may be displaced and pushed downward, so as to form a bulging sac in the vagina. Sometimes it has been so far prolapsed as to appear at the labia. This sac (or tumor) is usually a little

bluish in color; when the bladder is full, it is rounded and polished, and fluctuation may be felt in it; when the bladder is empty, it is soft, wrinkled and uneven; and long standing, and much exertion, increase its size. The passage of water becomes difficult and painful; there is a dragging sensation at the stomach; and inflammation of the parts commonly sets in. The anterior wall of the vagina is more or less prolapsed with the bladder. This displacement may occur before or during pregnancy, and may then prove a very troublesome complication in labor.

Treatment.—If there is any inflammation or feverishness, it must be relieved by relaxing drinks, as if it were a ease of inflamed bladder. After this (the bladder being kept well emptied by the use of the eatheter, if necessary), the organ is to be earefully and steadily pushed up to its place. It ean generally be retained in its position by introducing into the vagina a firm cylinder of muslin or sponge, covered with oiled silk, three inches long and an inch in diameter. This cylinder may be retained in the vagina by a bandage passing under the parts after the ordinary fashion of the monthly napkin; and . the vagina should be syringed about three times a day with a decoetion of hemloek, oak, or other strong astringent; and the eylinder itself should be kept smeared with a stiff astringent unguent made by mixing powdered oak or hemlock bark, or sumae leaves, in lard, and a little beeswax to give it firm-The woman should never be on her feet long at a time, nor allow the bladder to get distended with water.

When prolapse of the bladder occurs in labor, the urine must be kept drawn by using the catheter; and if this can not be effected, the physician may possibly find it necessary to make an incision in the bladder through the vagina, rather than allow the bladder to be bursted and its contents discharged into the eavity of the abdomen—which would rarely fail of resulting in death.

#### DISPLACEMENT OF THE RECTUM.

At rare intervals, the lower bowel is pushed forward into the vagina—earrying before it the posterior vaginal wall. It causes a soft tumor of moderate size, which usually disappears when the patient lies down; though sometimes the enlargement becomes considerable, and does not wholly disappear. It may be caused by falls, violent efforts at stool, etc., at a time when the vaginal walls are relaxed. It may come on slowly. Little trouble is occasioned by it. The tumor may be reduced by first unloading the bowel with an injection, and then proceeding as in the ease of displaced bladder.

## HERNIA OF THE UTERUS AND OVARIES.

This is an extremely rare affection. It consists in these organs making their escape through the muscles of the abdomen, being the same condition as that of the bowels in a case of rupture. The uterus alone, or one ovary alone, may escape; or the uterus and one ovary may escape together. The escape may be by the opening or "ring" in the groin; or by the lower ring; or through the middle

193

"line" (or thin portion) of the walls of the abdomen. The latter variety occurs only during the advanced stages of pregnancy, and is probably never complete.

Symptoms .- When occurring at the upper ring, a round and hard tumor is felt under the skin in the groin; if at the lower ring, a similar tumor presents at the flexure of the thigh. This tumor can not easily be forced back; pressure upon it causes pain, and probably nausea and faintness; and it is not soft, fluctuating, or movable, as is a protrusion of the bowels at these places. Upon introducing a finger into the vagina, its wall is found to be drawn tight, and curved upward toward the groin; and the mouth of the womb is very high up, and may be turned strongly toward the sacrum or even escape with the body of the uterus through the abdominal wall. Any movement of the tumor, is accompanied by a corresponding motion in the vagina. The patient suffers much uneasiness, and perhaps pain; the discharge of urine is more or less disturbed; and sometimes the protruding part becomes strangulated by the contraction of the muscles through which it has burst, and then congestion, suppuration, or even gangrene, may follow speedily.

The causes of this rupture are, weakness of the walls of the abdomen, abdominal dropsy, violences upon the abdomen, etc.; and hernia of the ovary alone may be occasioned by strong compression above the hips, and by too tight bandaging of the infant—especially if there be any sudden and severe

exertion, or violent crying, while the body is thus

over-tightened.

Treatment.-When any such accident occurs, early attempts should be made to replace the protruding To effect this, loosen all clothing, lie the patient upon the back, lift the knees well up toward the abdomen; and then, by gentle yet steady pressure upon the enlargement, seek to force the part back through the passage by which it escaped. If it be in the groin, the pressure should be made directly inward, and then upward: if on the thigh, the pressure must first be downward for half an inch or more, and then inward and upward. If the organ have been displaced so long as to provoke irritation, a fomentation of lobelia seeds should be applied over the parts for a few hours before attempting to replace it. A hernia occurring in a pregnant woman, can not be managed better than by keeping the lady mostly upon her back till after delivery. Attempts to return the organs, do not always succeed, even in recent cases; and in cases of long standing, their replacement may be impossible. The advice of a competent surgeon should always be sought, in any of these cases. When strangulation of such a hernia occurs, there is no alternative but to relieve it by an operation; and it is necessary to have this performed at the earliest hour possible.

# UTERINE DROPSY.

Dropsy of the womb consists of an accumulation of serous fluid within the cavity of this organ. The lining membrane of the uterus secretes this fluid; and

a closure of the mouth of the womb by a membranous growth, by a polypus, or by a rather permanent spasm of its muscles, prevents the liquid from escaping. It is oftenest met in women of middle age, and especially the married. It may occur during pregnancy, when it causes unusual distension and weight in the abdomen.

Symptoms.—The symptoms resemble early pregnancy, and may pass as such for some time. There are gradual enlargement of the abdomen, weight in the pelvis, swelling and tenderness in the breasts, suppression of the menses, and sometimes sickness at the stomach, and secretion of milk. Examination shows the enlargement of the abdomen to be soft and fluctuating; and fluctuation can also be felt by placing one finger against the mouth of the womb, and making a quick upward movement while the other hand rests upon the abdomen. The absence of quickening after due time, will undeceive the mother who anxiously hopes for gestation. Unmarricd ladies suffering uterine dropsy, generally have to endure much scandal till time exonerates them from suspicion.

Causes.—The direct cause of the excess of fluid, is a low chronic inflammation of the lining membrane of the womb. This lingering inflammation may be the result of blows, falls, and other violence over the uterus; of abortions, severe labors, improper handling during labor, rough interference with the placenta, etc. The general health is always bad, in such cases—both before and after the first appearance of the dropsy. The stomach is weak,

the countenance sallow, and the outward circulation feeble. Severe leucorrhea sometimes precedes uterinc dropsy, and continues with it.

Treatment.—In some cases, the accumulation of fluid forces an opening and discharges itself, after a fcw weeks; and then the fluid again accumulates, and the health fails steadily through a succession of such gatherings and discharges. In other cases, the fluid is retained, and accumulates indefinitely; and scrious injury, even to rupture of the organ, may be caused by this enormous distension.

Put the patient upon the use of the spiced bitters, or some other tonic and rather stimulating compound. Have her use a warm hip-bath every day, for half an hour; or give a mild vapor-bath from the hips downward every second day; or have her sit once a day, for twenty minutes, over the steam rising from hemlock leaves. The whole body should be bathed with warm water twice a week, and the bath followed by thorough friction; and if the surface is sluggish or cold, the stimulating or the rheumatic liniment may be used along the spine and over the lower abdomen once a day; or a wash of cayenne or smart-weed employed in the same way. The liver pills should also be used at night, so as to secure a full action of the bowels each morning; and this action will influence the expulsive powers of the uterus, though strong purgatives are not to be given, nor too much catharsis induced. Injections of elm and lobelia to the vagina, will favor the discharge of the fluid; and in obstinate cases, the emmenagogue tonic and pills may be resorted to, in

eonnection with the baths, liver pills, and vaginal injections. Few eases will resist this course longer than a week or ten days; yet some cases will not yield till after one or two stimulating emetics have been given, and some rare cases require vigorous treatment for several weeks.

When the fluid has been discharged, it is very necessary to sustain the strength and put the system in the best condition, that the dropsy may not return. The spiced bitters or the female tonic may be used, according as the patient is most feeble or most nervous. Should profuse menstruation set in, the female restorative may be used. Tepid baths, and good friction, must be used at least twice a weck; and stimulants to the spine and lower abdomen every day. Let the liver and bowels be kept in gentle action by leptandrin, or the laxative pills. The diet must be plain, unstimulating, and rather solid in character; damp feet, and other exposures, must be particularly avoided; tea and coffee must be used moderately; air and light exercise should be secured every day; the mind and nerves should be kept quiet; and all causes of uterine excitement and fatigue must be serupulously abstained from. In short, the course for chronic inflammation of the womb, should be pursued. Should leucorrhea set in, it must be met by the vaginal injections and other incasures elsewhere directed for that malady.

### POLYPUS OF THE WOMB.

The term polypus is applied to a class of fleshy tumors which grow from the inner surface of this

organ; and are distinct in symptoms from fibrous tumors-which will be mentioned hereafter. The shape of a polypus is most commonly that of a pear, with a thick stem attaching the mass to the womb; but sometimes it is a broad oval, and sometimes the stem is wanting and the tumor is attached to the womb by a very broad surface. Their growth is slow, and some of them never attain a size greater than a marble; but as they are supplied with bloodvessels, they may enlarge greatly-some of them having reached the dimensions of a gourd twelve inches long and five inches in diameter. Their surface is generally quite smooth, and covered with a mucous membrane. The color may vary from a pale red to a dull reddish-brown-according to the amount of blood with which they are supplied, and the freedom of their circulation. Some are gray. feel firm and solid, and at times are quite hard.

A polypus may have its point of attachment anywhere within the uterus, from the mouth to the fundus. They most commonly spring from the side of either the neck or body. As they enlarge, they distend the uterine cavity; and may finally dilate the neck of the womb, and pass down into the vagina gradually. The causes of their development are unknown; and it can only be said that they occur most frequently in lymphatic and sedentary people, are generally found before the middle of life, and attack both married and single. They are somewhat frequent; but some ignorant or empirical physicians have a habit of "suspecting" that every female complaint is a polypus, and demanding an

examination. Whenever an examination is really necessary, a truly sensible woman will assent to it; but they are needed much less frequently than is eommonly supposed; an honorable physician proposes them rarely, and only as a matter of necessity; and the medical man who makes it his rule in all kinds of eases, to require an exposure of the person to "satisfy himself whether polypus is present," had better be discharged at once.

Symptoms.—The symptoms of a small polypus, at the early stage in its formation, are very obscure; but in the advanced stage, they are very clearly marked. There is an increased mueous discharge from the vagina, with frequent purulent discharge; and in time a mixture of blood is added. Thus far, the flow bears a resemblance to ulceration; but the tenderness of ulceration is not present, and the eseape of blood soon becomes quite free. The hemorrhage, in fact, is one of the strong peculiarities of a polypus; and while the times and quantity of the flow are subject to variation, it is not long till the loss of blood becomes so frequent and so considerable as to reduce the patient's strength. There is a feeling of weight in the pelvie region, with aehing of the back and dragging sensations. The patient is feeble, and soon becomes pale; has impaired appetite, palpitation of the heart, a relaxed state of the bowels, and various irregularities of the menses. The hemorrhages, oceurring sometimes as fluid blood and sometimes as elots, may be looked upon as simple menorrhagia; but their obstinate continuance, with the other symptoms, will show

this mistake. The true menses are sometimes wholly suspended.

The frequent loss of blood soon leads to a small, feeble and rapid pulse; occasional faintness; and a tendency to dropsical swellings. The patient is inclined to nausca and vomiting, and very severe dyspeptic symptoms; there are, in some instances, contracting pains through the uterus; and there may be swelling and tenderness of the breasts, in consequence of the uterine irritation, and sometimes a little abdominal enlargement. As the tumor enlarges, it is liable to press upon the rectum and bladder; and will then provoke painful urination, and costiveness with frequent straining. The bulk of the tumor may finally so occupy the neck of the uterus, as to lead to the retention of the bloodwhich may then become very fætid, and injurious to health. The mucous discharge may be retained by the same cause, and one form of dropsy of the womb result. The uterine pains may break a thin stem or pedicle; and then the polypus is expelled and the patient recovers. More commonly, the tumor descends partly or wholly into the vagina, and may enlarge indefinitely. Its weight, when it is attached to the fundus, may cause inversion of the womb; and prolapsus is a pretty constant accompaniment. A small polypus will not interfere with conception, but is quite sure to cause abortion. The size of the tumor seems to make very little difference as to the amount of blood discharged.

Discrimination.—Polypus may be confounded with loss of blood from excessive menstruation; or with

prolapsus, inversion of the womb, hernia of the vagina or bladder, cauliflower excrescence, or even with pregnancy. And while the tumor is completely within the womb, it is sometimes a question of great difficulty to distinguish it from some of these conditions; though a very eareful comparison of the general symptoms, will usually make the question clear.

Treatment.—There is but one eertain cure for a polypus, and that is: Its removal, so soon as the tumor can be distinguished and reached. This operation is one for the skillful surgeon; who will effect removal by the ligature, the caustic, or the seissors, as the circumstanees in each particular case may lead him to deeide. But it is necessary to take every precaution to subdue the hemorrhage, and sustain the strength. For the first purpose, the lady should keep a horizontal position as much as possible, use astringent injections, and employ stimulants and diaphoreties according to need, as in the case of profuse menstruation. The strength should be sustained by tonics, as spiced bitters, wine of comfrey, yellow-poplar, white-poplar, etc. But these measures are merely temporary; and no delay should be made in consulting a reliable physician, and pursuing that course which his judgment advises.

# FIBROUS TUMOR OF THE WOMB.

While the uterus is liable to a fleshy growth, or polypus, depending from its inner surface, it is also at times affected with a fibrous tumor imbedded in the solid wall of this organ. These tumors are situated

at different parts of the uterus; they vary from small ones at a circumscribed point, to enlargements so great as to weigh upward of thirty pounds; and they are usually firm and of a structure like very dense muscles whose fibres interlace each other, but at other times are much like cartilage. They distort the shape of the uterus more or less; may create an enlargement in one or the other side of the abdomen; but at times are of a shape and size to give the woman every appearance of pregnancy, and if the courses be absent (which they commonly are in large tumors), she may be pronounced enciente—a case of which kind is reported in the chapter upon the Signs of Pregnancy. The growth of these tumors is usually quite slow, and unaccompanied by either hemorrhage or pain. They most usually appear between the ages of thirty and forty, but have no assignable cause.

Symptoms.—The chief symptom is that of weight and bearing down in the pelvis, with aching in the loins. There may be cramps in the legs and thighs, dropsical swelling of the legs, and sudden and transient colic pains of great severity about the navel. When these signs are accompanied by swelling of the breasts, suppression of the menses, and rotundity and firmness of the abdomen—which may be confidently looked for in large tumors—a woman may very easily believe herself to be pregnant, or pass for such by others. The pressure on the bladder and reetum, may give more or less difficulty in evacuating their contents. A large tumor in the back wall of the uterus, may cause retroversion of

this organ. Some prolapsus is common. In rare eases, there may be a rather free menstruation while the tumor is small; but not that frequent hemorrhage which makes a polypus. Conception may take place while yet the tumor is small, but abortion is likely to occur by the fifth month. These growths often occasion little inconvenience beyond their weight, and their pressure upon the bladder and bowel; and they may reach a certain large development, and then remain stationary for the remainder of life.

Discrimination.—When the walls of the abdomen are thin, and the tumor located well forward in the uterus, the nature of the growth may generally be detected without much trouble. In other cases, it will require great eare and skill to determine its character—ealling for a very thorough examination by the abdomen, vagina, and the bowel. That by the bowel is particularly necessary.

Treatment.—There is no ground to hope for a cure of these cases; but as they cause no such serious trouble as a polypus does, the inefficiency of treatment need cause no despair. The woman should sustain her strength by good hygiene; coffee, wine, stimulants, coitus, and all influences which excite a flow of blood to the uterus, should be avoided; care must be taken to keep the bowels and bladder free; general and foot baths should be used; and heavy labor and much walking avoided.

## CAULIFLOWER EXCRESCENCE.

The above term is given to a softish tumor which sometimes is found growing at the mouth of the uterus, and which bears a remote resemblance (in structure) to the surface of a cauliflower. It often encircles the entire mouth of the womb, and may extend a little into the neck of this organ. It causes no pain; its growth is slow; and its size may vary from that of a strawberry to a mass filling the vagina and even protruding beyond the external organs. Fortunately, it is a very rare growth; for it is difficult of removal, yet it will destroy the patient if it be not removed.

Symptoms.—The first and most constant symptom, is a discharge of water, which is without color or smell. The flow of this scarcely abates, at any time; and the quantity will finally increase until it becomes exhaustive from its great profusion. After a few weeks or months from its first appearance, this water is at times tinged with blood; and the quantity of blood gradually increases till coitus, a movement of the bowels, an examination of the vagina, or any slight disturbance of the parts, will bring on a temporary hemorrhage. Such losses of both water and blood enfeeble the patient, who becomes waxy-pale, dyspeptic, and dropsical; and usually dies in from two to four years, unless the tumor is removed. An examination shows the tumor to be soft, somewhat spongy, and a little granulated on the surface; of a rather transparent appearance, and light red color.

Treatment.—The growth must be removed by such means as the surgeon decides to be best—knife, scissors, or ligature. The strength must be sustained by tonics, dropsy removed by suitable means, and

bleeding checked by astringent. It is a malady that demands the earliest attention of the physician; and its strong disposition to return, makes its cure very difficult.

# CANCER OF THE WOMB.

This fearful malady sometimes attacks the womb; but, very fortunately, it is a rather rare disease of this organ. Its most common position on the womb, is about the neck; yet it may attack the body of the uterus, and also the ovaries. It is most frequent after the cessation of the menses, or from the forty-fifth to the fifty-fifth year of life. It may, however, appear in the very prime of womanhood; and some instances occur under the age of twenty. It would seem, also, most frequently to attack those who had not borne children.

Causes.—Upon this point, I can not do better than quote the following suggestive remarks of Dr. Tilt: "By placing animals in cold, dark, damp places, by giving them but a little vitiated air and allowing them no exercise, we can cause them to die of consumption: but we know not how to produce cancer. That it does not depend upon habitual intemperance, is clear from the fact that throughout life women are more liable to cancer than men. M. Leroy D'Etiolles has shown, on a large scale, that cancer is allied and dependent on the degradation of the human body which is brought about by age. The celebrated A. Dubois has said, 'the cause of cancer is in the nerves.' Dr. Dusourd observes, that a careful consideration of the cases of cancer, convinced him that in 75 per

cent. the disease had been preceded by long-continued grief, resulting from privation and change of social position. All we know of its cause is, that in women—particularly in those of a very nervous temperament and under the influence of grief—the blood becomes poisoned, and cancerous products are deposited in some one part of the body, and the contagion is gradually disseminated through the whole system. The most rational line of conduct is, to let life be governed by approved rules of health, so as to prevent a preponderance of the nervous system."

Cancer may be hereditary, especially in families of a scrofulous and erysipelatous tendency; but its transmission is much more rare than is generally supposed. While the nervous temperament seems most subject to it, the sanguine is almost equally liable. When the tendency is existent in the frame, the development may be excited by blows or falls, attempts to force abortion, masturbation, great excesses in marital intercourse, etc.

Symptoms.—A true cancer is always of slow development; and may occupy many years, in its progress from the first to the last stages. The increase in size is steadily progressive. The earlier symptoms are very obscure; but generally the first months of the disease lead to some irregularity of the menses, sensations of weight about the loins and fundament, and peculiar unpleasant sensations on the evacuation of urine and fæces. To these, after a few months, may be added pruritus, voluptuous desires accompanied by some pain on coition, a leucorrheal discharge with a reddish tint after intercourse,

strange longings and loathings very much as in pregnancy, hysterical attacks, melancholy, and generally acute (but temporary) pains in the breasts and other parts of the body.

Such an association of symptoms should receive? close attention; for while they may, to a measure, occur in other maladies, they excite a natural suspicion of the presence of cancer. Upon examination, the growth of the tumor keeps open the mouth of the uterus; if the tumor is anywhere upon the uterine neck, it is seen to be a hard, knotty, irregular mass, of varying size, pale, cold, and insensible. The posterior lip of the mouth of the womb is usually larger than the front one; and this part is more or less puckered and tense, and feels painful on pressure. The growth of this mass may be extremely slow, sometimes passing over a space of several years; and in a few cases, pregnancy has occurred during the growth of a cancer. But sooner or later, the mass begins to soften and becomes painful; and the softening advances somewhat rapidly, till the cancer becomes a rough and fætid ulcer. The cancer is now inclined to a far more rapid growth than before: and in a few weeks may spread through the womb, to the ovaries, bladder, and other parts. So soon as ulceration commences, a discharge is set up; and this is usually a dirty-white, but may be greenish, or even dark brown or almost black. It is very copious, usually acrid, and irritating to the vagina and soft parts; and soon becomes offensive-peculiarly and insupportably fætid. Hemorrhage usually appears soon after this discharge begins, or even before it; is generally

profuse, occurs at intervals, sometimes returns at regular periods, recurs from most trifling causes or from no apparent causes, and produces much loss of strength. Unless due examination be made, this hemorrhage may be mistaken for profuse menstruation.

With the commencement of softening, the patient begins to suffer pain. This pain is always of the peculiar character known as lancinating—" sharp as a knife," and shooting suddenly-through the pubes and loins, and to other parts of the body. When ulceration commences, the pain increases in severity; and there is scarcely a moment's ease from it. Before the ulceration starts, the pain may occur periodically-chiefly once a month, but sometimes once a week-lasting for a day or more at each attack. the case of a lady in Northern Ohio, who consulted me a few years ago, the pain recurred very regularly every four weeks, caused the most terrible agony, spread over nearly the whole body, and was accompanied by general spasms of a most fearful character. The pain increases in severity and constancy as the ulceration advances. "When a woman reaches this period of the disease," says M. Colombat de l'Isere, "she presents the most heart-rending picture of human misery. The functions of assimilation are exhausted. Appetite is gone, and digestion is deranged in a thousand ways. Emaciation, more or less rapid, sometimes passes into consumption of the bowels. The bony system, participating in the disease, becomes fragile and breaks of itself, as it were. The skin-which is dry, shriveled, wrinkled, and adherent to the bones—assumes the dull-white color of wax, or the earthy straw-yellow color which characterizes cancerous affections."

Cancer tumors reach different sizes before ulcerating—in some cases the size of a hickory nut, in other cases many times larger. When the softening commences, but before actual ulceration sets in, they speedily increase to the size of a cocoa-nut, or even much greater. A large tumor in the body of the womb, may be detected by way of the rectum. In some instances the pain is of an intolerable burning character.

Treatment.—It is a fact well known that cancer is one of the most formidable of all maladies. When it has advanced to the softening stage, no treatment can do more than palliate the suffering and retard the progress of destruction. But judicious management can effect both these, to a very comforting degree. Previous to the commencement of softening, treatment may entirely stop the advances of the disease; and some such cases have lived to a ripe old age, without any further cancerous trouble. It is of the first importance, therefore, that a woman suspecting herself of having a cancer, should consult a physician at the earliest hour; and permit him to make the most thorough examination necessary to satisfy himself. Diagnosis at this stage is often a very difficult matter, and requires much professional judgment; and the woman should always place herself in the hands of her medical adviser, and not attempt to treat herself; and particularly should she not resort to the use of patent nostrums, and adver-

tised panaceas, for this malady. Such things are usually got up in ignorance, and often do much mischief. And very many physicians who advertise themselves as professional "Cancer Doctors," should be shunned; for, while here and there one such may be an educated and honorable man, too many of them are arrant humbugs-imposing upon human credulity, and making use of the patient's fears as the ground for practicing unholy extortion. When one promises a positive "cure" upon the payment of several hundred dollars, he may safely be set down as an impostor-no matter by what diplomas and pretensions he may be surrounded. Nor should any weight whatever be attached to certificates of cures, even when signed by persons of the highest respectability. Such persons may have been treated just as such certificates describe; and an ulcerating cancer have been removed by the knife, or by caustic of some kind. The patient is relieved; the opening closes up; and in the burst of that patient's joy and gratitude, a glowing certificate of cure is given. Thus far, all is truth; but every intelligent medical man knows that a large cancer (when removed by the knife, or caustic or "plasters which miraculously extract the roots") will spread itself through the frame with most astonishing rapidity. The prompt and kindly healing of the old sore, is a most treacherous delusion; for in a few months, at farthest, the cancer will multiply itself at other parts of the frame, a dozen may spring from one, and the patient will sink rapidly and hopelessly. This is the concluding history of nearly every case so pompously advertised

as a "cure;" and while the certificate was true at the time given, the unscrupulous charlatan knows full well that it is a lie when he publishes it one year after its original date. I speak somewhat warmly on this matter, because I have seen so much of this cruel extortion and deception practiced upon this class of patients. There is a time when cancers can be removed with some hope of success; but there is also a time when their extirpation will certainly hasten death. The well-educated physician, who is found to be upright in all his dealings, is the proper man to consult in these cases; for he knows all the approved methods of treatment; and the secret measures of the cancer-doctors, always turn out to be old and familiar (even if not worthless) measures known to every intelligent physician. An honorable and well-informed medical man is the only one qualified to advise medicines, diet, etc., for these cases. He will tell when an operation is proper, and when it would be highly improper; and will himself direct the patient to some experienced man, if he prefer counsel. The advice of such a physician should always be valued greatly; and his skill and candor be alike respected.

#### INFLAMMATION OF THE OVARIES.

The ovaries are liable to many of the same general maladies that afflict the uterus. Among the most common of these are inflammation. This may occur in either the acute or chronic form.

I. Acute Inflammation.—This may occur at any period of life, but is most common between twenty-

five and forty. It usually affects but one ovary at a time. Its symptoms are very much the same as those of acute inflammation of the womb, except that the pain is rather toward the groin than in the centre of the pelvis, and the uterus is not swollen nor the vagina hot and tender. The feverishness is considerable; the pain is much increased by firm pressure directly over the seat thereof; the pain usually extends down the thigh, or even to the knee and toes of the affected side; and the misery is increased upon motion. The neck of the bladder is irritable, and the passage of water may cause pain and scalding; and motions of the bowels usually cause suffering by moving the ovary. In moderate attacks, the woman is apt to consider the pain in the thigh and groin as merely rheumatic, and may neglect it till it becomes settled seriously, or may aggravate it by the use of heating agents. Timely management will soon cut short the difficulty; but if it be allowed to progress too far, it may fall into congestion; and finally ovarian dropsy or suppuration may follow, an abscess form, and pus be discharged through the uterus, vagina, bladder, or surface. The causes are of the same character as inflammation of the womb; and the two organs may be affected in the same way at the same time.

Treatment.—Treatment must be directed to securing a free perspiration. That which has already been directed for inflammation of the womb, is the proper course here, and will meet all the requirements of the case. It should be pushed energetically, till a good perspiration is secured; and the

patient should not cease medication too soon, or get from her bed too early, as the acute attack would then very probably return, or a persistent chronic inflammation follow.

II. Chronic Inflammation.—In ehronic inflammation, there is not likely to be any feverishness; and perhaps but little general disturbance. There is a circumseribed pain in the groin, which shoots down the thigh or knee at times, is most severe at the monthly periods, and increases on marital indulgenee. The pain may be increased by firm pressure; but the insertion of the finger into the rectum, will quickly detect the ovary swollen and tender as it lies beside the uterus. This difficulty disturbs menstruation in some way-generally diminishing the flow and eausing it to return too frequently. Such a grade of inflammation usually precedes ovarian dropsy, or tumor, or eaneer; and on these accounts, it should always receive timely and thorough treatment. Even if none of these evil consequenees ensue, a chronic inflammation (even of a trifling grade) will presently develope hysteria, seiatie pains, indigestion, general nervousness, a sallow eomplexion, and eostiveness. It is a malady much more common than is generally supposed; and women often pass over its pains, as if thus to suffer and be annoyed were incurable necessities of their sex.

Treatment.—This should be the same as for chronic inflammation of the womb.

Abscess.—Abseess of the ovaries may follow either acute or chronic inflammation, but mostly the

former. When pus is about to be formed, the patient suffers chilliness or even distinct rigors; the pain in the groin throbs; there is a sense of weight and swelling in the parts; and the pulse becomes quiek and soft, though the general feverishness may abate somewhat. This aeeident will perhaps never occur, if the treatment of the first attack have been sufficiently vigorous. When the presence of pus is suspected, the same course of management must be eontinued, though less vigor is now required. If the patient feel weak, she may use spieed bitters, or a tea of camomile or poplar. Fomentations of elm and lobelia will invite the pus toward the surface, which is generally the best place for its diseharge. Spieed bitters will be needed during convaleseenee; or a mixture of balmony, colombo, and ginger, will form a good tonie. The laxative pills will be good to keep the bowels open. The strength is recovered very slowly.

#### DROPSY OF THE OVARIES.

Dropsy of the ovary usually occurs between the ages of 20 and 45, and is rarely met either before or after the appearance of the menses. It is generally preceded by a low chronic inflammation of the ovary; and all those circumstances which have been mentioned as provoking inflammation of the womb, may, by causing ovarian inflammation, act as so many provoking causes of this dropsy. The accumulation of water seems to take place within a thin sace which encloses each ovum in the ovary. This sac increases by actual growth, as the water accu-

mulates; its walls sometimes remain quite thin, but at other times become very thick and strong; and sometimes the original cyst multiplies new cysts within itself, and these in turn produce others, and the mass may thus be made up of an almost limitless number of small saes, each containing fluid. The enlargement is usually quite slow, and occupies several years. The size attained may ultimately be very great; and in some instances as many as five and six gallons of fluid (or a weight from 40 to 50 lbs), have been taken from them. The fluid is liable to very great differences, varying from limpid water to a greenish, yellowish, brownish, and almost black eolor; and sometimes is very thick and glutinous. Dropsy rarely affects but one ovary. In some eases, it assumes a malignant character, and may finally be associated with a cancerous condition; but usually it is not malignant, and is dangerous principally from its mechanical pressure upon other organs.

Symptoms.—The earlier symptoms of the disease are very obscure; but it is usual to find the milder symptoms of chronic ovarian inflammation. When such symptoms have continued for some months, the pain in the groin is sharp, and returns at pretty regular intervals; and if there are a sense of fullness in in the pelvis, of weight in the groin, and heaviness in the hip, ovarian dropsy may be suspected. If an examination be made at this period, with one finger in the rectum and one in the vagina, the fact of such a tumor can be definitely determined.

As the tumor enlarges, fullness and weight in the pelvis become marked; capricious appetite, swelling of the breasts, nausea, and even suppression of the menses, may follow, and give a conviction of pregnancy. Most commonly, the menses are regular, and sometimes too profuse. The weight of the tumor causes pain and dragging in the back and loins; and the pressure upon the neck of the bladder and the bowels, causes much difficulty in passing water and induces constipation. The abdomen enlarges very slowly. In time-after a space of years, in many cases—the tumor gets too large to remain low in the pelvis, and then rises upward into the abdomen. It then relieves the bladder from pressure, and micturation is easy, and perhaps very frequent. The uterus is dragged upward; and the bowels, stomach, liver, spleen, and lungs, are gradually pressed upward. This pressure causes universal disturbance in all these organs, such as costiveness, indigestion, torpid liver, and difficult breathing. These symptoms increase in severity, advancing to settled dyspepsia, heartburn, palpitation, pain in the sides, vomiting (which sometimes becomes very troublesome), and diminution of urine. The pressure of the cyst upon the other parts, provokes a light inflammation in them; and adhesions take place between it and the uterus, Fallopian tubes, bladder, bowel, etc. These adhesions so bind the structures together, that a change of position occasions more or less pain. The abdomen enlarges steadily; the affected side may at first seem greatest, but the tumor soon occupies the middle line of the body; and the size presently becomes quite as great as the last months of pregnancy. Some patients are constantly liable to attacks of sharp pain in the tumor. If the contents of the sac are quite watery, and its wall is thin, fluctuation may be felt; but if the sac walls are thick, or the fluid is glutinous, or the sac be made up of many small cells, no fluctuation may be felt, but the abdomen may feel quite hard, and even a little knotted.

The disturbed state of the stomach, liver, bowels. and other organs, soon works a great change in the general condition of the patient. She becomes pale, nervous, anxious, emaciated, wrinkled, and feverish. The breathing is sometimes almost checked, and the patient dreads suffocation; pressure on the veins may cause dropsy of the lower extremities; the constipation is obstinate to the highest degree; and hectic fever may precede death. Sometimes the sac reaches a considerable size, and then remains stationary for the remainder of life. In a few instances, the fluid has been absorbed spontaneously, and the dropsy disappeared. At times, a thin sac will burst and discharge its contents into the cavity of the abdomen; when a cure will readily be effected if the fluid is bland, but serious consequences will quickly follow if the fluid is acrid.

Ovarian dropsy is often mistaken for dropsy of the abdomen; and may be confounded with pregnancy, tumors, displacements of the womb, etc. It often requires much skill to determine these points positively; but when a lady has the association of symptoms which commonly mark the beginning of ovarian dropsy, it will be best for her to seek professional eounsel. A cure may be effected in the early months; but will be nearly impossible, except by a surgical operation, after the ease has stood for some time; therefore it is important to detect an ovarian dropsy as early as possible.

Treatment.—Sometimes a cure can be effected by very rigid attention to the general health; and if not a cure, at least a decided eheeking of the growth; but in many eases, no treatment seems to be of any The proper course to pursue, is to use a plain and regular diet, go much in the sun and air, dress loosely and warmly, avoid eoitus, and keep the bowels gently moved. The obstinate costiveness will require the liver pills, and probably a daily enema, besides the use of brown bread and the fruits. Tepid or warm baths should also be taken twice a week, to maintain a free action of the skin. Some patients are much benefitted by using the following liniment, very freely, twice a day, over the affected ovary: tineture of eapsieum, a pint; oils of sassafras, spearmint, and rosemary, each one drachm. Fomentations of mullein leaves are also useful, and may be worn at night. This course should be pursued very perseveringly; and any disturbances of the stomach, kidneys, etc., should be met by such measures as their conditions may demand. Where the sac becomes so greatly developed as seriously to interfere with health and safety, a surgical operation is the only resort left. The fluid is sometimes drawn off, by a form of tapping; and when the sae is a single one, the fluid thin, and the constitution good, a cure may then sometimes be effected. But a dense tumor, or one with many cysts, will need to be removed. This is a serious operation, and may not terminate favorably at all times; yet in the large majority of instances it successfully relieves the patient, and saves her from the lingering and distressing death which will presently result from this dropsy.

The ovaries, like the uterus, are sometimes afflicted with *fibrous tumors*, and also with *cancer*. Their course and symptoms are of the same general character as those which are present when these maladies

affect the womb.

# CHAPTER VI.

## MARRIAGE.

THE marriage relation brings to both parties in the contract, the holiest and purest joys of all earthly institutions, when it is used aright; and it yields fruits of extreme bitterness, when it is used amiss. Its responsibilities are peculiar, and descend to the most minute details of life; and as God Himself has established this relationship, and as it influences the whole future existence, and mayhap the eternal fate, of both the man and the woman, it is a bond which should never be entered into without the most careful deliberation. To woman, the consequences of marriage are of more fearful import than

to man; for her health, her strength, her affections, and almost her spiritual being, fall under the guidance of her husband; and upon his integrity, judgment, and tenderness, depends all that she can enjoy upon earth. With what extreme caution, therefore, should she become bound in such a relationship; and how clearly should she understand and be guided by every law, of either mind or body, which regulates the possibilities of a happy union.

Marriage should be emblematic of the union of mind to mind, and heart to heart. It is well to enter upon this relation from physical sympathy; but there should also be a mental adaptation, and a similarity of views relative to the grand principles of action in life. The bodily perfections must fade; the ardor of affection may cool, or (if the girl have pursued a course of deceptive blandishments during courtship) it may be diverted into other channels when these deceptions come to be realized after marriage. But the mind's fixity of purpose may be depended on; and a marriage founded upon a complete mutual understanding of actual tastes, hopes, and principles, will withstand all shocks and tests, and draw from each succeeding year and trial new strength and purer happiness. Both parties finding the self-same mental and moral beauty which they once admired, and constantly deriving from each other the benefit of a mutual interchange of thought; live together in peace and love and increasing admiration-forming but one personality, though with a masculine and a feminine side. And the duties of their married state, then springing from a complete

identification of heart and soul, become daily sources of newer happiness and higher, purer affection.

It is not the purpose of this volume to instruct women in the art of courtship nor the selection of a husband. The ladies are sufficiently apt in the first; and touching the second, the dictates of good sense will teach any woman that she can not be happy with a man whose tastes are quite unlike her own, whose education and pursuits are foreign to any thing in which she finds pleasure, and who is either profanc, sensual, a scoffer at Christianity, or a fashionable tippler. Nor will any young woman with her wits about her, allow herself to be deceived by the fine appearance, and genteel address, and delicate attentions, of a new acquaintance; but will compel her emotions to wait upon her sense, and take ample time to see if he possesses those solid qualities upon which the happiness of a whole life may be staked, or whether his outer refinements are but a trap of guaze—that will vanish into thin air at the first rude touch. The object of this volume is to inform woman in those physical duties which relate to herself; and as there are several such duties concerned in rendering the married state happy, they should be understood fully by every woman before she thinks of forming that relationship.

Time for Marrying.—Early marriage is a very evil tendency of the age. The habits of society are now such, in the main, as stimulate the young woman during puberty, and excite her emotions unduly; so that she is planning for a marriage companionship before her frame is at all ripened to bear the

marriage duties. Such premature marriages very rarely result in mental happiness, no matter how much the lying romances say to the contrary; for the girl's mind is then in a state of agitation and stimulated emotion, which disqualifies her for forming a correct distinction between the matrimonial adventurer with his high polish, and the worthy companion of less fancy pretensions. But there are many physical evils resultant from early marriage, which too generally make the subsequent life a ceaseless round of suffering. A girl may be capable of maternity at 15; but she is not fitted to be a true mother until 21, or even later. If she assume this relation earlier than 21, it will find her with her frame not yet solidified; and that which is in itself imperfect, can not produce that which is perfect. The female germs are not endowed with their highest vitality till 21; and an unripe germ, like an nuripe seed, ean not lay the foundation for a strong and vigorous being. Children thus produced, have some element of radical weakness when they are born, and will earry it with them through life; and although this weakness may be modified, and the general health improved, by the wise adaptation of the laws of hygiene, one can never fully repair a fault of constitution that was engrafted at the first formation of the man.

But the mother of less than 21, can not spare from her own frame that amount of nutrition necessary to the development of a truly healthy child. She is yet in a growing state, and requires large quantities of nutriment to perfect her development; and if this nutriment is diverted from supplying her own wants, her health will materially suffer; and if it is not thus diverted, the fœtus will suffer; but most generally both mother and child show the consequences of insufficient nourishment. Children thus born are inclined to scrofula, consumption, weak limbs, etc.; and the mothers grow very nervous, more or less hysterical, suffer leucorrhea and various menstrual derangements, and are much more inclined to menorrhagia, abortions, and falling of the womb, than those who delay their marriage till the proper age. It is quite notorious that first children, now so commonly born before the mother is 20, rarely present that strength of body and mind of the later children of the same parents. And even when a girl presents uncommon vigor of constitution, and is pronounced "as large at 16 as she will ever be," a premature marriage is still found to make its evil impression upon her nervous system and the uterine organs; and the eares and duties of a family drag wearily upon her body, and leave her no time for that intellectual cultivation which is so necessary to her own calmness and happiness of mind, and to the guidance of her offspring. And warm climates, although they hasten the menstrual function and the power of conception, do not hasten the true marriageable period; for girls who there become mothers before 21, show themselves sad wreeks before they are 30, and their first children (if not also the later ones) are strongly prone to disease and early decay. And in the higher walks of society, how common is it for the first-born to present a rare ripeness of mind; but to possess a body too feeble to support it to maturity—leaving it to drop prematurely into the silent grave. Such things would seldom be, if girls refused to place themselves in the way of becoming mothers till nature had ripened or solidified their own frames in every tissue. Nature's marriageable age, then, is not before 21; and they who tax nature, must inevitably pay for their temerity. The law is plain, and well-established by the best medical philosophers; and those who are wise, will keep the law.

Causes for Delaying Marriage.—Some physical circumstances render it highly necessary to delay marriage, even after the marriageable age has been reached. In some instances, the arterial excitement of the ovaries and uterus which characterizes puberty, is continued beyond the twenty-first year; and if marriage be contracted while it continues, severe local inflammation will quite surely be provoked, and even serious consequences may follow. An unusual tardiness of development, as elsewhere explained, should also delay marriage; for marital duties under such circumstances, would be followed by severe disappointment to both parties, and might cause grave troubles to the woman. Some females are less developed at 21, than others are at 14; and some are in a less marriageable stage of development at 25, than others are at 21. Chlorosis, or green-sickness, should always be a sufficient cause for delaying wedlock; as the woman can searcely be cured after marriage, and either abortion or diseased offspring will follow pregnancy. Sometimes, a mild

form of hysteria is much benefited by as early a marriage as the constitution will admit; but a confirmed hysteria is generally made worse by marriage, and the children born of such a mother are strongly inclined to high nervous maladies, as epilepsy and other convulsions. Nor should a woman ever enter into a marriage alliance during the time that she is passing through the critical period known as "the turn of life;" for such a relation, newly formed during that period of extreme bodily agitation, nearly always leads to a fatal result. When the frame has become fully settled in its new state, after the cessation of the menses, there may be no physical objections to wedlock.

Highly Objectional Marriages .- There are some eireumstanees under which the marriage relation should not be contracted at all. For instance, when two people are very similar in person and temperament, they ean not hope to have healthy or longlived children, even though they themselves are healthy. This is a faet which has long been known to physiologists, but is seareely attended to by the people; and it would be well if every man and woman would inform themselves on this point, and refuse to enter into wedlock with any person of their own (or almost their own) temperament; for no matter how robust and healthy each party may be, they may not have any children at all, or need not hope to have children who are likely to reach the period of maturity.

Again, two weakly persons should not get married; and neither should such an alliance be formed between two persons who have a constitutional tendency to the same form of disease—as scrofula, dyspepsia, consumption, etc. The parties themselves may be in apparently good health; but their feebleness, or the malady with which both their constitutions may be lightly tainted, will break out with decided severity in their children. A delicate girl should wed a man of sound health, and one whose temperament, complexion, etc., differ widely from her own. The extremes of difference may not always be chosen, lest too great a dissimilarity of mind lead to unhappiness.

There should be no intermarriage between members of the same family stock, as between first, second, and third cousins, or even more remote degrees of blood relationship. Such marriages deteriorate the race; and the children of such relations are liable to strong scrofulous developments, to blindness, deafness, epilepsy, rickets, and even idioey. This is particularly true of first cousins; and a continuance of such marriages by even third cousins, in a few generations would scarcely leave a healthy and intelligent member of the family. Among the aristoeracy and the crowned heads of Europe, where such alliances are kept up for the sake of perpetuating wealth or titles to the family name, it is notorious that the practice has shamefully enfeebled the physieal and mental strength of the resultant steek.

No young woman, however healthy she may be herself, can seldom find any lasting happiness in marrying into a family presenting a strong taint, in their constitution, of such maladies as consumption,

scrofula, cancer, epilepsy, or insanity. If the taint is but light, and her own constitution is quite free from it, and her temperament quite the opposite of her husband's, no ill consequences may result. But no young man should ally himself to a woman without informing her beforehand of any such family taint; and if the taint is on her side, she should do the same by him. The contract would then be entered into with a mutual understanding; and there would afterward be no heartburnings on the ground of deception.

Causes which Forbid Marriage. - There are some circumstances which, if properly reflected upon, disqualify a young woman from forming any matrimonial contract. Among these are the following: I .-When she has no menstrual flow, though fully developed in body and quite beyond the normal period of puberty; as such a fact is usually founded in the absence of the ovaries, or other genital deformity, which might cause grievous disappointments. II .-Pelvic deformity, rendering the safe delivery of a child very improbable, if not impossible. III.-Latent consumption or insanity, or active cancer, epilepsy, or spinal deformities. Such maladies destroy all prospect of domestic happiness to both parties; and no temporary convenience or gratification should be allowed so to control the judgment as to entail a future life of sadness, suffering, privation and despair.

Marital Intercourse.—Sexual union is conducive to the health and happiness of both the husband and wife, providing it be enjoyed with due restraint but; there are conditions which strictly regulate it, in order to the health and safety of the wife. Extreme care, self-restraint, and moderation should be inviolably observed by the husband in the first weeks of wedlock, lest alarming violence be done to the delicate and sensitive organism of his young wife. Should the passage be found obstructed by an imperforate hymen, or prolapse or other difficulty of the vagina, all efforts of the kind must be at once ceased, and the proper steps taken to overcome the obstacle.

Sexual intercourse is exhaustive to the frame, and especially so to women. Her fine structure of body will not endure the frequent repetition of this act; and her pure mind will speedily become disgusted with the husband who makes personal gratification the paramount object of his married life. It is quite too common a fact, that married women are enormously overtasked in this respect. By such exhaustive repetitions, their strength is prostrated, their nervous system shattered, and their reproductive organs weakened; and it is, alas, too common to hear women complaining of the sound health they enjoyed when girls, but of the poor health from which they have suffered "ever since they were married." The marriage institution was not designed thus to impair the soundness of the constitution; and such eomplainings show that misdemeanors have been committed somewhere. In too many instances, the difficulty may ehiefly be owing to, or very largely aggravated by, the undue exactions of the husband; as such excesses eause langour, depression, local inflammation and ulceration, loss of beauty, and even mental decay. All the ailments peculiar to women, are always made much more severe by exhaustion of this nature, such as hysteria, leucorrhea, profuse menstruation, prolapsus, the liability to abortion, etc., and sometimes these maladics are caused solely by marital excesses. It would contribute very materially to woman's health and happiness, if husbands would practice a far greater degree of self-denial, all through married life, than the majority of them seem disposed to; and such self-denial would also be better for their own vigor of body and nobleness of mind, besides securing them the grateful respect of their companions.

## CHAPTER VII.

## PERIOD OF PREGNANCY.

### THE REPRODUCTIVE FUNCTION.

THE reproduction of the species—their nurture in the womb, and their support and culture during infancy and childhood—is the grand prerogative of woman. It is a noble and a holy office, to which she is appointed of God; and the duty is both pure and sacred, even as the perpetuation of the human race is honorable and heaven-directed. That was a beautiful tribute which the Athenians paid to the worth of woman's functions, when they made the house of a pregnant female too sacred to be violated

even by the law in pursuit of a murderer. We need not imitate such an observance; yet respect to female purity, and honor to our own maternal parent, demand that we revere the peculiar generative office of woman, and regard every prospective mother with unusual delicacy and treat her with studied refinement.

Every woman may expect to be in the position of a prospective mother, soon after marriage. While a few do not become pregnant for some months, and in an occasional instance some years, after entering upon matrimony; by far the greater portion of wives conceive within a few weeks after commencing wedded life. This is a fact well-known to those who have been mothers; and it should be made known to daughters before marriage, that they may escape the surprise, vexation, and despondency, which many experience so painfully on finding themselves unexpectedly enciente.

It will be a great advantage to a woman's mind, throughout the term of gestation, to know that the duties she is discharging are such as are fully provided for in the organization of her system. Nature has, from the very days of her own feetal life, been moulding her for the office that she is now to perform; has been developing her organs with especial reference to the task which now lies before her; and has been making every provision of vital tenacity, nervous force, muscular contractility, and nutritive capacity, for the completion of her maternal duties in the most harmonious and successful manner. And after twenty or more years of such elaborate

preparation on the part of nature, woman need feel no apprehension as to the ability of nature to accomplish the designs for which she has so long been laboring. Agitations and unpleasant feelings may arise under such new and strange causes for the general sympathy of the body; but if the woman has grown up in close observance to the laws of life, has developed her organism and entered the married state in obedience to the rules of physiology, and will conduct her term of pregnancy in accordance with the rational laws of health, nature will be found perfectly capable of sustaining her through the discharge of every obligation now resting upon her. So provident is nature of her resources, and so fully does she compensate for all the labors she requires, that the term of pregnancy is proverbially one in which a woman's health may be remarkably built np. Often are the feeble found growing strong, the nervous becoming calm, the pale acquiring ruddiness, and the delicate putting on vigor, as they advance through gestation. So constant are these facts, that every physician knows that a woman's constitution can be greatly improved by a careful observance of the laws of health while she is carrying her child; and this is a time of prostration or danger only to those who disregard the safe rules of hygiene while pregnant, or who have assumed the duties of maternity while laboring under such severe constitutional maladies as consmnption, epilepsy, etc. Let woman take courage therefore, when she finds herself enciente; and make use of those healthful rules which are at her command, and by the aid of which she may now

so readily increase the vigor and endurance of her constitution.

The period and duties of pregnancy are divided into three general parts, namely: 1, Conception, or the facts connected with the fecundation of the ovum. 2, Gestation, or the term during which the fectus is carried in the uterus. 3, Labor, child-birth, or the expulsion of the fectus from the womb.

The entire period of pregnancy, from the time of conception to the day on which the child is born, usually covers a term of 280 days. This is equal to forty weeks; to nine solar or common months, or to ten lunar months. But the period may be somewhat less than this, or it may be longer. A mature child may be born in 273 days from conception; or the period may be extended to 300 days. It is oftener extended than shortened, and 290 days is the greatest ordinary extension; yet the French laws allow that child to be legitimate which is born 300 days after connection. In some very rare instances, the highest medical authority has earefully collated the facts in cases where the gestation lasted, in the several instances, 319, 324, 332, and 356 days. Such instances are remarkably rare.

As conception always takes place about the menstrual period, it is easy to compute the date when labor is likely to commence. Counting 280 days from the last day on which the menstrual flow was seen, will give the week in which the child will most probably be born. This computation approximates so closely to the facts in medical experience, that a woman is rarely mistaken if she expect her day of

.

delivery to be on the 281st or 282nd day from that on which her menses last ceased. For the sake of convenience, the following table is presented—showing the somewhat premature computation of 273 days, or nine solar months; and the regular computation of 280 days, or ten lunar months:

```
Menses last seen Jan. 1. Labor will occur between Sept. 30 and Oct. 7.
         66
                Feb. 1.
                                 46
                                                                  Nov. 7.
                                                    Oct.
                                                          31
                                                              6.6
         44
                                 66
                Mar. 1.
                                          46
                                                    Nov. 30
                                                              44
                                                                  Dec. 5
         66
                April 1.
                                 66
                                          66
                                                    Dec.
                                                              44
                                                          31
                                                                  Jan. 5.
         44
                                 66
                May 1.
                                          44
                                                    Jan. 31
                                                              6.6
                                                                  Feb. 4.
                June 1.
                                          66
                                                    Feb. 28
                                                              64
                                                                   Mar. 7.
                                 46
                July 1.
                                          66
                                                                   Apr. 6.
                                                    Mar. 31
                                                              6.6
         46
                                 46
                                          66
                Aug. 1.
                                                   Apr. 30 "
                                                                   May 7.
                                66
                                         64
                                                   May 31
                Sept.
                      1.
                                                              4.4
                                                                   June 7.
         86
                Oct.
                       1.
                                46
                                          66
                                                   June
                                                           30
                                                              66
                                                                  July 7.
         66
                Nov. 1.
                                 66
                                         66
                                                   July 31 "
                                                                  Aug. 7.
         66
                                 66
                                          44
                                                   Aug. 31 "
                Dec.
                     1.
                                                                  Sept 6.
```

When the menses cease on any given day after the first of the month, the same number of days is to be added to that date in the above table on which the labor would have been expected had the flow stopped on the first. Thus, if the catamenia are last seen on the 10th of June, add those ten days to the 28th of the following February, or to the 7th of March, and the birth of the child may be expected between March 10th and March 17th.

A very simple, and sufficiently accurate method of computation, is to count three months backward from the day of the stopping of the flow. This will give the month, and day in that month, which will complete the carliest term of gestation. Thus, if the menses cease on June 16th, three months backward would give March 16th; hence on March 16th of the following year, is the soonest that labor may be expected, and March 23rd is the latest.

When labor occurs before the ninth month of gestation, and after the end of the sixth month, it is ealled *premature*. After the end of the sixth month, the child is often able to support its life; and is then said to be *viable*. Children born at the end of the seventh month, are more likely to live than those born at the eighth month. First children are often a little premature—as by a week or two.

#### CONCEPTION.

Conception, or impregnation, is the union of the male sperm with the female ovum, by which the latter becomes endowed with a vitality that transforms it from a simple egg to the rudiment or embryo of a new human being. A girl is eapable of conception as soon as the menstrual flow appears; and impregnation always takes place immediately before, or within two weeks after, the monthly flow. This, as already mentioned, is owing to the fact that the menstrual discharge is accompanied by the discharge of an ovum; and the latter always escapes from the uterus sometime within two weeks after the monthly evacuation eeases. The mouth of the womb opens from twenty-four to forty-eight hours before the eatamenia come on; and as the ovum may be detached the first day of the flow, and as the male semen may retain its impregnating power twentyfour hours after being discharged within the vagina, it is evident that cohabitation a short time before the flow comes on, is likely to be followed by coneeption. And this is the more likely to occur at such a time, from the fact that sexual union excites

the ovaries and fallopian tubes, and will thus hasten the discharge of the ovum. But the ovum may not be detached or find its way into the uterus till after the menstrual flow has ceased, and may linger there from one to fourteen days; so that intercourse may lead to impregnation any time during this period.

The impregnation of the ovum generally takes place in the ovary, for the semen has many times been found upon the ovaries of animals killed just after copulation. From thence the fecundated germ finds its way into the womb, and there attaches itself for the purposes of development. But impregnation may, and often does, take place in the womb; and the precise point at which the junction is effected, depends very much upon when the semen starts upon its mission. But the uterus is the matrix for the development of the new being-the embryo, or fœtus; and only in rare cases does its development oceur elsewhere. It is a peculiar fact, however, that the fecundated germ is oceasionally impeded in its transit from the ovary; and then the development of the child takes place in the fallopian tube. In still more rare cases, the fimbriated extremity of this tube fails to grasp the germ; and then the feetal development takes place in the ovary, or between the folds of the broad ligament. Such eases are ealled tubal, and abdominal, or extra-uterine, pregnancy. Fortunately they are very rare; for they may prove serious to the mother.

While it is a common rule for but one ovum to ripen and be detached each month, two or more may be detached. Or one may be detached naturally; and then sexual congress, near that menstrual period, may cause the detachment of another which was almost ripe. These facts will explain the cause of twins, triplets, etc.; for the one portion of emitted semen is sufficient to impregnate any number of ripe ova it is likely to meet.

Beginning of Life.—The life of the new being commences at the very moment of conception, and it then actually enters upon existence. It is from that minute a living human being; and its rudimentary state no more deprives it of the right of being protected as such, than the rudimentary state of the infant (as compared to the full-grown adult) would deprive it of the right of protection, or make its destruction a matter of no importance.

Influencing the Sex .- It is probable, also, that the sex of the child is determined at the time of conception, although the genital organs of the fœtus can not be distinguished till a number of weeks afterward. Many speculations have been entered into, as to the measures which may be taken to control the sex of the child; but these are mainly of a character entitled to no manner of confidence. following general rules are all the reliable teachings of physiology upon this point: The child is most likely to receive its sex from that parent whose health, strength, and erotic vigor, are strongest at the time of conception. The bodily condition of the parents being equal, the mother generally has the strongest desires within three days after the menstrual flow ceases, and children conceived within that period are likely to be girls; whereas, if the father restrain himself, his impetuosity may overmatch that of the mother by the fifth day after the catamenia cease, and then the result of conception may be boys. These latter propositions only approximate the truth, and can not be relied upon as infallible; for a multitude of circumstances, unknown and beyond control, may influence the results.

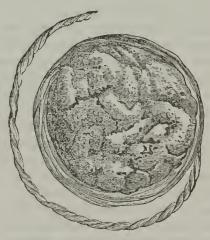
### DEVELOPMENT OF THE FŒTUS.

So soon as conception takes place, the inner surface of the womb secretes a peculiar material, which soon forms a new lining to the organ—covering it throughout, and closing the mouth of the organ. This lining or membrane is quite thin and soft, and remains throughout the entire period of gestation; as the germ enlarges and occupies the cavity of the organ, it pushes this membrane before it. The membrane is thus doubled downward upon itself, and presents two thin layers, glued together; the outer layer touching the surface of the womb at all points, except where the placenta is attached.

When the impregnated ovum has traversed the Fallopian tube, reached the opening from the tube into the uterus, and pressed before it the thin membrane already mentioned, it attaches itself to the side of the womb, and remains there till separated by labor. The point at which this attachment takes place, is usually on the top or fundus of the womb; but it may be at any point along the sides, even to the neck of the uterus. When impregnation takes place by the semen meeting the ovum in the womb, it is probable that the embryo attaches itself at a

lower point than is usual when fecundation takes place in the ovary.

Soon after this attachment takes place, the ovum begins to enlarge. On the twelfth day, it consists of a cell as large as a pea—filled with a turbid fluid, and the rudiment of the future child's heart appearing in the centre as a minute dark spot. At the third week, this rudiment of a fœtus has reached



Placenta. Side next to the Womb.

the size of a small ant; and at the fourth week, the limbs begin to project, and the fœtus is found to have a minute thread connecting it to a fixed spot against its mother's womb. This thread gradually develops to a cord as large as one's forefinger, and varying in length from eighteen to twenty-nine inches; it is made up usually of two arteries and

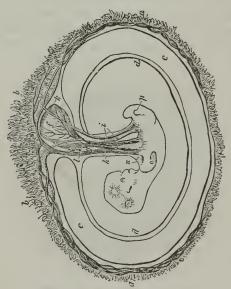
one vein (covered with a tough membrane), conveying pure blood from the mother to the child, and the impure-blood back to the mother; and is called the navel-string or umbilical cord. It is attached to the child at the navel; and the spot at which it reaches the mother gradually enlarges to a disk about six inches in diameter, three-fourths of an inch thick, soft and pliable in structure, made up chiefly of blood-vessels, and called the placenta, or after-birth.



Placenta. Side next to the Child.

The thin membrane which covered the little cell at conception, enlarges steadily with the growth of the fœtus, and completely occupies the cavity of the enlarging uterus. It constitutes a sac or bag, made up of two membranes, containing the fœtus floating in a moderately clear water. This water serves as a protection against shocks and sudden uterine con-

tractions, and at the full term of gestation varies in amount from two to five quarts. The two membranes of this sae are called the *chorion* and the *amnion*; and the liquid is called "the waters," "the bag of waters," and the *amniotic fluid*.



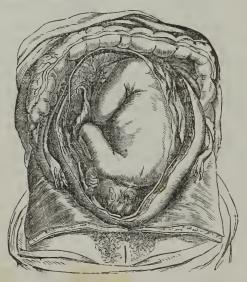
Fœtus six weeks old.

The fœtus observes a very regular grade of development, of which the following is a brief synopsis: At six weeks, the size is about that of a tame bee; places for the eyes, nose, and mouth, quite visible; limbs showing as rounded prominences; bones of the body begin to be slightly traceable; head larger than all the rest of the body. At three

months, the length is about three inches; sex can now be determined; bones of the extremities forming, and giving a natural outline to these parts; bones of the head and spine developing. At four months, the length is usually a little more than five inches; the movements of the foctus are now beginning to be strong enough to be felt by the motherwho ealls this the time of "quickening." At five months, the nails begin to show and the museles to be formed; the length is between six and seven inehes. Between the fourth and fifth months, or a little later in women of thick abdominal walls, the beatings of the feetal heart ean generally be heard by the ear placed upon the abdomen over the womb. They are quite feeble at first, but grow steadily in strength; when first heard, they may range from 145 to 160 to the minute. At six months, the length is from eight to nine inches. At seven months, it is between eleven and twelve inches; and is possessed of a development sufficiently perfect to allow of existence, if expelled from the uterus. At eight months, it measures from fourteen to fifteen inches; and at the end of nine months, is from twenty-one to twenty-three inches long.

The head of the fœtus remains very large, throughout gestation; and at birth, is still proportionately greater than any other part of the body—being then usually five inches in its longest diameter from before backward, and four inches in its broadest diameter. The bones of the skull are not completely closed till some time after the child is born, but leave an "opening" of considerable size on the top of the

head, and a smaller one at the crown. This fact shows one of nature's wonderful provisions for safe delivery; as these "openings" allow the bones so to bend and slip over one another as to accommodate themselves to the shape of the pelvic passage. The lungs of the fœtus, not being used in the womb, are comparatively quite small; but the liver, which now performs the chief blood-purifying function, is proportionately large.



Fœtus and its envelopes, showing the position previous to natural labor.

Positions of the Fætus.—The feetus is not suspended in the womb by the umbilical cord; for this cord is designed for the conveynance of nourishment, and not for mechanical support. The child floats, so to speak, in the amniotic liquor. It lies enried up, with its knees to the abdomen, the heels to the buttock, and the chin down on the breast. The head being so large and heavy, naturally falls down toward the mouth of the womb, whenever the mother sits up or stands; and this is probably the eause for the very great majority of children being born in the "natural position"—that is, with the head first presenting. But the movements of the ehild often change this position, especially when the mother is lying down-which will account for the greater strength of the fœtal movements so often noticed by mothers during the night. The movements of the fœtus sometimes result in getting the umbilieal eard wrapped around its neck, one, two, or even three times-especially when the eord is unusually long. The cord also at times gets into eomplete knots from the same eause. In some instances, the death of the fectus seems to have been eaused by these twists of the cord cutting off the eirculation; and when they do occur, they are always annoying, and may prove fatal, if not untangled from around the neck in labor.

Nourishment of the Fætus.—The fœtus neither eats nor breathes while in the uterus, but the system of the mother has to perform both of these very important functions for it. The mother has to prepare its nourishment, and purify its blood. This is done through the medium of her lungs; which become both lungs and stomach to the fœtus. The blood does not go from the mother through the placenta

into the child, and then back to the mother. It merely goes from the arteries of the mother to that portion of the placenta which is next to the uterus; and then flows back into the general venous blood of the mother. While at, or in the placenta, it is met by the venous blood from the child-a very thin partition being between the mother's arterial blood and the child's venous blood, as the thin partition of the lung-cells lies between the blood and the air. Through this delicate partition, the purification of the child's blood takes place. The mother's arterial blood imparts its burden of nutriment to the blood of the child, and the child's venous blood yields up its load of impurities to the circulation of the mother; and by the uninterrupted performance of these interchanges, the fœtus receives that large amount of nutrient material so necessary to its development.

By reflecting for a moment upon this strange and important function of the placenta, it will be seen that its attachment to the uterus must be very firm. It is a vast series of minutely interwoven fibres; fixing the after-birth so closely to the uterine walls, that considerable violence is necessary to its separation before it has thoroughly fulfilled its duties. No mother need alarm herself, nor allow any ignorant nurse to alarm her, with tales about the "after-birth growing fast to the side." It never "grows" anywhere but upon the inside of the womb; and to that it does indeed grow very "fast," or else no fœtus would ever reach the development of a full child. And the same wonderful vitality of the frame which developed the child and its placenta from so small a

germ, is also able to provide for the separation and ejection of the placenta in due time—after this structure has finished the performance of its functions.

Diseases of the Fætus.—The fœtus, while in the womb, is liable to a series of diseases, as inflammations, small-pox, syphilis, degeneracy of the liver, etc. The placenta is also liable to certain forms of disease. Such affections usually cause the death of the fœtus, and thus lead to abortion; but an unhealthy placenta may continue to perform its duties well enough to sustain fœtal life to full term.

### PHYSICAL CHANGES IN THE MOTHER.

Enlargement of the Uterus.—While the above developments of the fœtus are going on, the womb undergoes corresponding and equally wonderful changes. Its walls, instead of thinning by distension, thicken very much by new deposits; its blood-vessels seem multiplied as well as increased in size; and from being a small organ, measuring but three inches in length and weighing but two ounces or less, it attains a length of twelve or more inches, a breadth of nine inches, a thickness usually of nine inches, and a weight (of its own) usually above three pounds. It has increased in superfices, more than 500 times its original size!

During the first three months of gestation, the enlargement it undergoes is limited mostly to the fundus, the extreme upper portion. After that the body begins to enlarge; as this growth advances downward, it begins, by the fifth month, to encroach upon the canal of the neck; and by the close of the

full term, the neck is so much expanded as to be observable only as a ring, and the lower extremity of the uterus presents in the vagina as a blunt oval with a circular roughness on this cervical ring marking the position of the os uteri.

Positions of the Uterus .- During the first two months of gestation, the uterus descends to a lower. than natural position in the pelvic cavity. This causes it to press the bladder a little downward; and the results of this are, an increased frequency of desire to pass urine, a little pain at the navel, a drawing-in of the navel like a little cup, and a distinct flattening of the abdomen-especially across its lower part. At the third month, the uterus begins to rise in the pelvic cavity, and presses the intestines up somewhat; and this change in position causes wind in the bowels, and the abdomen becomes enlarged. At the fourth month, the top of the organ is about half-way between the pubic bones and the umbilicus or navel of the mother; and as the fundus now begins to lean a little forward, the mouth of the womb is found further back than usual. The changes then advance quite regularly in this manner, till the term of gestation is filled-the uterus rising gradually and keeping its inclination forward; the intestines rising upward, yet lying behind the womb. At the fifth month, the top or fundus of the womb is on a level with the navel; at the sixth month, it is two finger-breadths above the navel, and the navel ceases to sink inward and now begins to puff out a little; at the seventh month, the fundus is half-way from the navel to the lower edge of the stomach, and

the navel stands out prominently. At the eighth month, the fundus is well up to the edge of the stomach, the intestines and liver are much pressed, the stomach and lungs also feel burdened as the viscera rise up against them, hacking cough and palpitation may be provoked by the same pressure, and the abdomen presents a very great forward projection and roundness. Toward the end of the ninth month, the womb descends in the pelvis, considerable flattening of the abdomen and dimunition of its size will follow, the cough and breathing become easier in consequence of the pressure being much removed from the base of the lungs, the weight of the womb upon the neek of the bladder again increases the frequency of urination, and pains and erampings through the womb and smaller bowels, are very common during this month. Nature is now preparing her forces for the duties of labor -- which, however promptly it may proceed at the last, never comes unawares to the vital instincts of the frame.

Changes of the Breasts.—The breasts, or mammæ; having to be prepared for the nourishment of the child when born, generally begin to enlarge soon after impregnation. This enlargement is accompanied by more or less of a pricking or stinging sensation; the breasts feel severe pain; the nipple begins to stand out more prominently, and is sensitive or even painful; and the veins about the nipple soon become visible from enlargement. The circle of flesh immediately around the nipple, changes its light tint to a deeper and somewhat brownish hue; at times becomes very dark, and involves the nipple in the same

discoloration; is gradually roughened upon its surface by a number of whitish and puffy projections rising up a little; and sometimes seems chaffy or scaly. These changes in color may be very slightly visible at the end of the second month; but usually are not much noticed till during the fourth month, and the more marked peculiarities in appearance may not be seen till the sixth month. Milk is sometimes found in the breast as early as the third month, but may be delayed much later, or even not appear at all. Indeed, in some delicate women, the changes in the breasts may all be delayed till within a few weeks of gestation; and it is only in the robust and vigorous that these organs undergo very early alterations.

Mental Changes.—The period of gestation usually makes distinct changes in the general tone of the mother's mind. Some who were amiable and checrful, now become inclancholy, petulant and nervous; while many who were despondent and unsociable, become gay and companionable. Some exhibit most unaccountable perversions of feelings, as an inordinate desire to commit needless theft, or even to perpetrate some unnatural crime.. Intellectual vivacity and strength are remarkably exalted in some; while dulness and even semi-stupidity weigh upon others through the entire period. A very few become insanc, and continue so until delivery; while others, afflicted with some form of monomania, remain perfectly rational upon all subjects so long as gestation continues.

#### SIGNS OF PREGNANCY.

Cessation of the Menses is one of the earliest signs of conception. It is not, however, a positive sign; for a newly married woman generally has the courses stop for a few terms without pregnancy; and cold, ovarian disease, and some severe affections of the uterus, may occasion suppression-though the palpable failure of health in these latter cases, attracts attention to their true causes. On the other hand, young wives may be pregnant, and yet have a slight show for two or three terms after conception; while in some very rare cases, women continue to discharge a sanious fluid regularly through the entire term, and suffer no detriment to their own health, or that of the child. The discharge in these cases, comes from the neck of the womb, and is not properly the true menses.

Morning Sickness is a very common symptom of pregnancy. The woman feels very sick at the stomach soon after eating breakfast, or even if she eat no breakfast at all; and the morning meal is generally vomited soon after it is taken. This symptom may commence almost simultaneously with fecundation; but usually it appears after a few weeks from conception, and ceases about the middle of the fourth month. Some few persons have it return again during the last weeks of gestation. It arises from nervous sympathy between the stomach and womb, and causes no severe disease of the stomach. It has sometimes happened that the vomiting is very continuous, and causes alarming prostration; but the rule is, to find the woman's stomach feeling perfectly

"settled" all day after the morning nausea. But any suppression of the menses, or irritability of the uterus, will excite nausea and even vomiting, even when there is no pregnancy.

A Peculiar Appetite is another common sign of pregnancy. A pregnant woman usually has a marked improvement of the appetite, and loves more and solider food than has been her custom; and this is accompanied by a corresponding improvement of digestion, despite the morning sickness. The wisdom of this increased desire for food, is apparent, when we remember that the mother has now to prepare nutriment for both herself and her child. But this appetite generally puts on some peculiar form-demanding some peculiar meat, or fruit, or pastry, or dainty, with an intense craving. This craving is commonly known by the term of "longings." Few women, almost none, escape these longings; and sometimes they hunger for articles strangely at variance with all the former appetite. And it is also a peculiar fact, that articles which were formerly indigestible to the woman, will often be digested with ease when taken in answer to these "longings." As a rule, such peculiar appetites should be pretty fairly gratified.

Salivation, or a peculiar flow of spittle, is another common sign of pregnancy. The quantity secreted is sometimes enormous; it usually is spoken of as having a sweetish taste; and it is not accompanied by any soreness in the mouth or fetor of the breath. Some women also have a peculiar stoppage in the ears, giving a desire to remove it by frequent swallowing;

and others are peculiarly prone to neuralgic pains in the head, jaws, and elsewhere. Many women suffer greatly with neuralgic toothache during the whole period of gestation; though such teeth should not be extracted during pregnancy. A woman learns one or more of these peculiarities as connected with herself; and recognizes the fact of conception by their sudden and violent reappearance after a long absence.

Quickening is another of the signs which distinguish pregnancy—occurring usually about the middle of the fourth month. Yet some women who have been mothers, may have the nervous sympathies and imagination so highly wrought, as positively to believe they feel the sensation of quickening when no pregnancy exists. This hallucination has many times been met in a form so positive, that nothing but time could undeceive the woman as to her actual condition; and presents a remarkable form of hysterical delusion. But in other cases, quickening has been feigned for various purposes.

The aggregation of the symptoms just mentioned, affords the strongest presumptive evidence of the existence of pregnancy. When they are associated with the physical changes incident to the mother—enlarging abdomen, ecssation of menses, swelling breasts, and the secretion of milk—there need be little doubt of the existence of a fectus in the womb. But even the physical changes may be due to other causes than fecundation. For instance, the abdomen may enlarge from uterine dropsy, and still more deceptively from the womb becoming the seat of a

large fibrous tumor (not polypus); and either of these may present cessation of menses, swollen breasts, and morning nausea. Even the secretion of milk is not proof of actual pregnancy, though commonly regarded as positive evidence of this state of things. In some instances, the menses are suppressed; and the breasts each month enlarge, secrete milk freely, and then subside for three weeks-thus proving the lacteal fluid to be a metastasis of the catamenia. Chronic excitement of the ovaries frequently leads to the secretion of milk; and an unimpregnated woman may, by regularly irritating her nipples or putting a child to them, excite this function, and so divert the uterine excitement as to have the catamenia cease. Baudelocque reports a case of this nature, occurring in France, in which a deaf and dumb girl, eight years old, repeatedly applied to her nipples an infant which her mother was suckling-the mother being sick, and unable to nurse the babe. Milk came to the child's breasts, and she suckled the babe for a month. It is a fact well known to medical men, that in the Cape Verde Islands, old women and even men are employed as wet nurses.

It is true that these incidents are anomalous, and do not commonly stand in the way of any woman's knowing when she is pregnant; yet the anomalies do occur, and therefore the utmost care is sometimes necessary to decide positively that a woman is enciente. The utmost skill and judgment of the physician, are sometimes necessary to decide this point; and even he may find himself in error, unless his

examination have been of the most minute and thorough character. When it is remembered how very strongly the appearances of pregnancy may be simulated by disease, justice demands that the tongue of scandal shall not attempt to blight any woman's reputation on appearances; but that all women of good repute shall be held to be totally innocent, till time unequivocally proves them guilty. Prof. G. S. Bedford, of New York, details a case in illustration on this point, the lessons derivable from which are so valuable, that the condensed report deserves quotation:

"I was requested to visit a lady in New Jersey, thirty miles from New York; and on my arrival, was received by her venerable father, who seemed broken in spirit. The patient was laboring under that bane of human existence, consumption; and it was quite manifest that death had claimed his victim. Her father was a clergyman of high standing in the English church. At a very early age, this young lady had lost her mother. At the age of 18, an attachment and matrimonial engagement were formed between herself and a young barrister. Shortly after the engagement, she began unaccountably to decline in health; her habits of mind became changed; her personal appearance exhibited alterations evident to the most superficial observer; her abdomen enlarged, the breasts were fuller than usual, the appetite was capricious, etc. The rumor spread that she was the victim of seduction, and her altered appearance the result of pregnancy. Her engagement was broken off. The daughter, conseious of her innocence, requested the opinion of a medical man, who informed the father that she was undoubtedly pregnant. The indignant father requested additional consultation; and the second medical man confirmed the opinion of the first. The father then resigned his pastoral charge, sold his property, and removed to America, where, in a land of strangers, he hoped to find that peace of mind which had been denied to him in his native home.

"Entering earefully and critically into an examination of the ease, I stated unequivocally that she was not pregnant. This caused not the slightest emotion with either father or daughter; for the daughter knew her own innocence, and the father had never questioned her virtue. As to her present health, nothing whatever could be done for it; and in four weeks after, she died. Having previously requested the privilege of confirming my opinion by a post-mortem examination, I was now ealled to perform it. The examination revealed in the uterus a large fibrous tumor; but not a trace of conception -present or past. The moment I had removed the tumor from the womb, the father seized it convulsively and exclaimed: "This is my trophy; I will return with it to England, and it shall confound the traducers of my child."

## ABNORMAL CONCEPTIONS.

Super-fætation is a term applied to those cases in which a woman already pregnant, is said to conceive a second time. The idea is founded on the fact that women have given birth to one child; and some few

weeks afterward, gave birth to a second child. In some instances, the time between the two labors has been as great as two, and even three months. It has generally been supposed that such children were conceived at one time, but that one birth was premature and the other at full term; but while this supposition may sometimes be correct, it will not account for those eases in which both children showed evidences of a nine-months development, though born three months apart. The facts of some females having a double uterus, and of some continuing to menstruate throughout gestation, make it not impossible for a double conception to oecur. Some women have given birth, at the same time, to twins of different colors; and in such cases the mothers have admitted to having connection with a white and a black man nearly in the same hour. False conceptions, or moles, have been spoken of elsewhere.

Deformities—Marks.—The eauses of deformities, of deficiency or excess of growth in some part, and of marks, are not always known. There can be no doubt that, in some cases, the mind of the mother has a clear influence in producing them; but probably the majority of them occur without any such influence. Yet the mother's influence is sometimes very strong—especially when painful or unpleasant sights, memories, or imaginings, impress themselves powerfully and persistently upon her mind. If she possess that good state of health which will secure her ealm nerves and an imagination under full control of reason, the most harrowing things will pass

by without leaving any painful memories, or inducing any feetal deformities. This fact should impress on woman the importance of keeping her nervous system in the best possible condition during pregnancy; of not allowing her imagination to dwell upon bad sights; and especially not to keep herself perpetually in a foolish dread lest something terrific may be seen.

#### FALSE CONCEPTIONS-MOLES.

In false conceptions, there is no error in the impregnation itself, but the life of the fœtus has been blighted by some exhaustion or shock of either body or mind. It then becomes a foreign substance within the womb, where it undergoes some changes in form and substance, losing mostly the appearance of a fœtus, and having coagulated masses of blood distributed over and through it. It is generally expelled from the womb between the second and third months after conception. If it remain longer, it passes into a solid, fleshy mass, of irregular shape, sometimes hollow in the centre, with spots of blood over it, and a disposition to bleed. These are moles; and sometimes they form soon after conception. They seldom attain a size greater than two fists, and are generally expelled before they get half so large. Hydatids consist of clusters of sacs, varying in size from a pin-head to a grape, either round or oval in shape, and filled with a fluid either limpid, or slightly discolored with a milky or straw tint. They first begin to form upon the outside of the ovum and placenta, after conception has taken place; and from a small beginning, they gradually increase in number and size, put an end to all fœtal development, and may accumulate (by repeated additions) to an enormous mass. They may be expelled after seven or eight months (sometimes sooner); but in some cases they remain, slowly accumulating for five or more years. This fact is at times an important question as touching a woman's chastity; for a widow may discharge a mass of hydatids a year or more after the death of her husband; and yet the impregnation from which the hydatids originated, may have been a legitimate one.

Symptoms.—These resemble pregnancy, especially for the first few months. After the fourth month, the absence of quickening, and of any trace of the sounds of a fœtal heart in the uterus, are occasions for suspecting either a false conception, or uterine dropsy. The health is, in general, about the same as in pregnancy; but the presence of hydatids often causes undue feebleness and paleness.

Treatment.—The uterus will expel its contents, after awhile; and the case is then to be managed as one of abortion—that is, let the expulsive efforts go on, but take precautions against the free hemorrhage that sometimes occurs. In a few instances, the flowing will be very profuse, and will call for a vigorous exhibition of the strongest measures elsewhere directed for this difficulty. Excessive and long-continued lochia sometimes prostrate these patients; and profuse menstruation may supervene. These sources of exhaustion are to be met by the management directed for Profuse Menstruation.

When hydatids remain beyond the nine months belonging to regular gestation, they may occasion much weakness; and are at the least very unpleasant. By pursuing the course directed for uterine dropsy, and then bringing up the tone of the system, the hydatids will in due time be discharged. Violent measures must not be resorted to, however great the temptation; for fatal hemorrhage might follow.

## HYGIENIC RULES FOR GESTATION.

It has already been remarked that, during gestation, the health of a mother may be improved greatly by a careful pursuance of the modes of life fitted to her condition. Very fortunately, the woman usually has the means entirely within her own control; and a little attention to the requirements of her frame at this time, will save her from most of the inconveniences commonly suffered during these nine months, and will very greatly increase the probabilities of her offspring being vigorous both in body and mind.

The food of a pregnant woman should be composed largely of succulent vegetables and fruits; while salted meats, spices, onions, and similar harsh articles, should be abstained from as much as possible. But positive rules can not be given on this point; as the longings peculiar to most women, will often call for the use of articles that otherwise would be forbidden. These longings are seldom felt to a controlling degree by a woman who has previously led a life of good-sense; but when they occur and become very powerful, even some apparently nox-

ious artieles had better be allowed, than to subject the woman to the extreme nervous and mental irritability that may grow out of a refusal. The result of the indulgence usually is, that the stomach presently revolts at the article (if it do not digest it), and a more rational appetite is apt to prevail for some time after. Yet it is a very absurd thing for a woman to foster such peculiarities, and to nurse them into ungovernable strength, when a little ealm firmness in her own mind would quiekly banish the desire. Such a course will multiply her longings, and keep her mind and stomach in a state of unending agitation and experiment, which can not fail to be injurious to the health. Some are very fond of elaiming indulgences, on the ground that it may impair or disfigure the child if the eoveted food be denied; but this is a notion not founded in real faet, and a mother should dismiss it from her mind, lest it lead to the use of a very bad diet from which she might otherwise easily abstain. It is only when the eraving for a particular article becomes restless, and can not be put down by a fair effort of the reason and will, that such longings can be gratified safely.

An error very often committed in the diet of a pregnant woman, is in making it too large. Allusion has already been made to the fact that the appetite usually increases during pregnancy, and this particularly after the fourth month. This is a wise provision of nature; but nature must be left to regulate it herself, and not coaxed or forced into creating an appetite when none exists, or eating more food than the system asks for. The appetite and

the capacity of digestion occasionally fail for a time; and if then the stomach is crowded with food on the plea or urging that the mother must eat for herself and the child too, a morbid state of the digestive organs will follow. Nor should the woman be tempted to eat, and to over-load her stomach, at any meal throughout pregnancy, by sitting before her a heterogeneous diet of hot bread and cold bread, meats, vegetables, honey, preserves, pickles, pics, radishes, etc., etc. Such a course is sometimes pursued, under the mistaken tenderness that the woman must not be allowed to "go without something she may need, but could not think of." This mode of living will soon derange the soundest stomach; and then call up strange longings which are more the result of that derangement, than the demands of nature. Let the diet set before such a woman always be plain, and mostly of the light and succulent kind already mentioned; let her see none but fresh meats plainly cooked, and but a few dishes of any kind at one meal; and then if she take a very strong fancy to some additional and peculiar article, it can be provided with safety. Coffce and tea should be used very sparingly; the large use of weak and warm drinks is too relaxing, and no liquor whatever is proper.

The clothing of a pregnant woman should always be loose and warm. That is a very reprehensible plan, adopted by many women to conceal their condition as long as possible (as if it were a disgrace), of wearing their clothing so tight as to press in the abdomen and breasts. Such a practice increases

the morning nausea, induces flatulence in the bowels, and costiveness, by the pressure exerted on the abdominal viscera. It commonly provokes pain and colie in the womb and bowels, and may induce misearriage under very serious circumstances. It may also press in the nipple, and thus lead to severe ineonvenience during after suckling; and it many times has dwarfed, deformed, and even diseased the ehild. No woman should for a moment girt her chest or body tightly; though in the latter months of gestation, if the weight of the gravid uterus is burdensome, an elastie girdle several inches broad may be worn around the body below the abdominal prominence, and suspended by elastic bands passing over the shoulders in such a way as shall not interfere with the breasts. And besides being loose, the clothing should be suitably warm for the season; drawers are indispensable; flannel should be used in winter and fall; and no negligence in these matters should allow a woman to contract cold, or to disturb the equalized flow of her circulation. The period of pregnancy, it will be remembered, is one of exalted nervous susceptibility; and the frame can not now endure the exposures and changes of temperature which before were of small eonsequence; therefore, unless the natural heat be now greatly augmented, the amount of clothing should be increased.

A woman in these eircumstances should have plenty of sleep, which is one of the best of soothers to their nervous system. Very early rising is not proper, and a brief nap through the day is often an advantage. For the same reason, these women

should beware of too much hard work; which will emaciate and enfeeble the child, and generally eauses a severe labor. There may be exceptions to this; but they exist only among those women who are much more like animals than like cultivated people. Hard work, much dancing, long walks, heavy lifting, journeys, and similar exertions which make sudden and unusual demands upon the strength, must be avoided by every woman who would secure ealm nerves, healthful gestation, safe delivery, and hearty children. But the extreme of idleness is also injurious; and sedentary habits deprave the appetite, create a morbid sensitiveness, and lower the general tone of the system. The best course is, to take a little moderate exertion every day, to enjoy a share of cheerful company and other recreations, and to go out of door every day, to be extremely continent in amorous pleasures (which are often most desired during this period, but any frequency in which is very exhaustive and nerve-impairing), and in all other ways to lead a life of calm moderation.

Tepid sponge-baths are peculiarly soothing to women during this period. There is a strong prejudice against them; but the objection applies only to baths repeated too frequently, continued too long, or used at too cool a temperature. The warmth should be from 80 to 85; the bath should occupy but a few minutes, especial provisions should be taken against cold, and it should be used about once a week in warm weather, and once in two weeks during cold weather. A woman who had not been used to bathing, would

find it a bad plan to begin the practice during the last half of gestation.

It has been seen that a woman's mind is very susceptible, and inclined to many unwanted variations, during pregnancy. These features should engage the most tender solicitude of the husband; and he should now exercise toward her the extreme degree of attention and forbearnee. He may make his own and her life miserable, and entail the most unhappy disposition on his offspring, by any attempts at the sternness or unbending firmness which might be justifiable under different circumstances. Every idle whim need not be gratified; but neither must they be ridiculed or stubbornly opposed. The husband of tact, who fully understands the duty of tenderness he now owes his wife in the mental vascillations she is enduring for his sake, will readily contrive ways for gratifying reasonable desires to a satisfying extent; and of diverting the mind from unreasonable ones, by offering other and quite as agreeable opportunities for pleasure. Diversion, in good variety and of a soothing character, is now one of the great needs of the woman's being; and very simple efforts to gratify her therein, will keep her calm and happy. This is also a peculiarly favorable time to furnish the mother's mind with intellectual food in moderation-not novels and exciting romances, but soothing literature of a moral and refining cast, historical and popular scientific themes, etc. A limited portion of time spent in reading and conversation on such topics, will be a source of great satisfaction to the prospective mother; will call off

her mind from dwelling upon herself, and give it a higher and more comprehensive tone; and will probably help to insure a stronger and more evenlybalanced intellectual east to her child.

# CHAPTER VIII.

### DISEASES OF PREGNANCY.

WHILE the reproduction of the species is a function wisely established by nature, and wonderfully provided for in the economy of the system, the period of pregnancy nevertheless has a multitude of ailments. Most of these are attributable to the increased sensibility of the frame, the thoughtless exposures or over-exertions of the woman, or the evil habits of living so prevalent in society. Very many of the disturbances peculiar to this period, are quite light; some women seem to suffer no inconveniences whatever; and in most instances, the system soon returns to its regular action, by giving it the advantage of good hygienic regulations. It is quite out of place, therefore, for a woman to be turning to medicine, and especially so to alcoholic beverages, for every trifling sensation that is out of the usual channel. Let her first give scrupulous attention to suitable rules of health, as directed in the last chapter. Let her then make up her mind to bear some annoyances and inconveniences, as being incident to her situation. But let her also remember that severe affliction is not a necessity; and that the judicious use of medicines will bring her much relief, when her troubles become distinctly settled and annoying.

Some cautions are always necessary in using medicines during pregnancy. For instance, no sharp purgatives should ever be taken, such as aloes, mandrake, gamboge, many patent pills, etc. The action of such medicines on the lower bowels, may affect the womb injuriously; and it is on this account that a diarrhea or dysentery occurring during gestation, should be relieved promptly. Emeties are also to be avoided; though they may be used with perfect safety, when internal congestions, and obstructions of the liver and stomach, weigh down the system, or threaten to provoke misearriage. In short, all strong and perturbative measures must be avoided, and mild agents relied upon-except when some rare circumstance may render the use of some vigorous medication much less objectionable than its omission.

# DISORDERS OF THE NERVOUS SYSTEM.

Headache.—This is a very common affliction during pregnancy. That form of it which is purely nervous, generally appears in the early months, is of a sharp and neuralgic character, commonly arises as part of the sympathies with the uterus, may be provoked by strong emotions of the mind, is often associated with neuralgic pains elsewhere, and even with temporary paralysis. It is generally relieved

by an assafœtida pill three or more times a day; or by the lobelia pills; or a tea of lady-slipper, a heaped teaspoonful of the powder to a gill of warm water, and two tablespoonsful every hour or two. A tea of the anti-spasmodic mixture is equally good; a liver pill may be used to move the bowels gently; and sometimes it will be necessary to give the nervine injection. Quiet and rest must be obtained.

One variety of this headache is due to a pressure of blood on the brain. Bleeding and purging were the old-time remedies, but are highly improper. An occasional tepid-bath, with the use of the diaphoretic mixture in moderate quantities each day, aided by a light and vegetable diet, will soon restore the blood to its proper channels, and relieve the head. The laxative pill will be useful in the same connec-\*tion. If the headache proceed from deranged liver, stomach, and bowels, a liver pill may be given morning and night, with a teaspoonful of powdered boneset in starch water as an injection in the morning. The laxative sirup is good for the same state, to be used in quantities sufficient merely to open the bowels. The open air and exercise are necessary. the headache is intermitting, very small doses of quinine, or salacin, or hydrastin (from golden seal), may be used besides.

Toothache.—This vexatious suffering is common to nervous women, but they should not have their teeth extracted now. Plugging also seems to do little good, under these circumstances. The pain is neuralgic, and is best relieved by the same measures directed for the neuralgic form of headache. Cook-

ing-soda, bayberry, burnt alum and salt, calamus, and other articles, may give a temporary relief, if applied about the tooth.

Sleeplessness .- Few women are subject to this; and those who do suffer, are generally of a nervous temperament and hysterical tendency. It is most common during the latter months of gestation, and may be occasioned by sedentary habits, close and heated rooms, late company, or even the movements of the child. If the mother sleep well through the day, and is awake much at night, it is not a case of sleeplessness. Fresh air, freedom from evening company, and a little daily labor or exercise, are necessary in seeking relief. The assafætida pill (two or three for a dose) may be taken at bed-time, and repeated as needed through the night. A nervine injection should also be used in the evening; and a liver pill, or dose of leptandrin used occasionally. The suppers should be particularly light, and eaten not less than three hours before going to bed. A cool sponge-bath in warm weather, or a tepid one in cool weather, may be used before going to bed; and often affords great relief. If the lady is feeble, and tosses about and moans during sleep, she should use the female tonic during the day; and the assafætida or lobelia pills at bed-time.

Disturbed Sight and Hearing. Sometimes the patient's eyes are affected; and she fancies that objects are moving, that flashes of light flit before her, that things are double, etc. There may be difficulty of hearing in one or both ears, or ringing noises, or a feeling of stoppage provoking frequent swallowing,

or even deafness. And the sense of smell may be equally disturbed. These feelings may occasion much alarm to the woman, and unprincipled humbugs sometimes take advantage of her fears to extort huge fees for what they flaunt as a "marvelous curc." The difficulties are but temporary, and need occasion no alarm. Treat them as directed for the nervous form of headache, use a light diet, take an occasional tepid bath, and wash the upper half of the spine night and morning with a strong wash of red pepper, or with the stinulating liniment.

## DISORDERS OF THE LIVER AND DIGESTIVE ORGANS.

Nausea and Vomiting.—These troubles, already described among the signs of pregnancy, are the result of the sympathetic nervous action between the uterus and stomach. Vomiting schoom sets in till nausea has continued a number of mornings; but sometimes there is no vomiting at all, and then the nausea is very distressing. In some cases, the patient will vomit through the day, and especially after eating; and in a few rare instances, it continues so persistently as to cause emaciation and great feebleness. Marital indulgences aggravate it very much. The treatment is often very unsatisfactory, and all cases can not be relieved by the same measures. A sparing and succulent dict, and the avoidance of any foods which the woman finds disagree with her, are the first necessities. Merc emptiness of the stomach, with the sudden movement in the position of the womb on rising, seem often to occasion the vomiting; and such cases may sometimes be benefited by tak-

ing a small dish of weak broth or porridge, or a few swallows of weak tea or coffee, before rising from bed. Much strong tea and coffee are always improper. The bowels should always be kept open, either by the laxative pills, or small quantities of the laxative sirup. A moderate use of tonics will then usually strengthen the stomach and relieve the vomiting; and among the best for this purpose are golden-seal, yellow-poplar, scull-cap, and blue-cohush. They may be used alone, or in any desired combination; and taken three or four times a day in powder, infusion, or tinetured on diluted maderia wine. A weak tea of composition, sipped in small quantities, will relieve some; but strong stimulants are usually objectionable. Great sourness of the stomach, may be overcome by small quantities of soda or salaratus or lime water, or by the neutralizing mixture in quantities to suit; but such alkalies should be avoided when possible. In some cases, diluted lemon-juice, vinegar, or cream-of-tartar, will be a decided benefit. Advantage is always derived from applying strong stimulants to the abdomen, especially over the region of the stomach-such as a very strong decoction of red pepper, or smart weed, or the stimulating liniment. The disturbance of the stomach often depends entirely upon an undue excitement in the uterine organs; and then the patient must pursue the course elsewhere directed for Chronic Inflammation of the womb. In some of the most distressing cases of nausea, when the stomach is inclined to low inflammation, from two to three grains of lobelia seed may be given in powder, and

repeated every couple of hours; or a weak tea of lobelia and spearmint (or catnip) may be given in doses of a couple of teaspoonsful every hour or less; and at the same time, the above stimulants must be used over the abdomen, and a tepid sponge-bath given to invite the flow of blood to the surface. Some of the most persistent cases of vomiting are connected with great derangement of the liver, but no inflammation of the stomach; and no relief can then be obtained without the use of some relaxing emetics (as with a mixture of equal parts of lobelia, bonesct, and white-root), with other suitable measures between the emetics. The emetics may be repeated as needed, and can be used without the least degree of fear as to their proving mischievous.

Heartburn.—This symptom usually appears during the latter months of pregnancy, and may prove very troublesome; but some women are tormented greatly with it from the first months of gestation. It depends upon feebleness of the digestive organs, and acidity (amounting to acridness) of the stomach. It is best met by using spiced bitters, or the tonics already mentioned for nausea; a regulation of the bowels by a liver pill at night: and by the use of powdered magnesia, soda, charcoal, or chalk, when demanded. Equal parts of powdered chalk, charcoal, and blue vervain leaves, half a teaspoonful of the mixture every six or four hours, is often very excellent. Two ounces of golden-seal made into half a pint of sirup, and to this added two scruples (or about a small even teaspoonful) of bi-carbonate of soda, and half an ounce of the tincture of gum myrrh, make a good

preparation; of which a teaspoonful or more may be used every four or three hours. Lime water in tablespoonful doses, or bi-carbonate of potassa, are good alkalis. The alkalis, however, must not be depended upon, or used only when real acidity demands them; and must not be indulged in so freely as to neutralize the gastric juice actually necessary to digest the food. A plain and sparing diet, with mild tonics, will usually prevent the necessity of any but quite small quantities of alkalis. Sometimes nothing will give any relief till some emetics are administered.

Salivation.—The excessive, even the enormous spitting which sometimes accompanies pregnancy, is troublesome, but not dangerous. It seems chiefly to arise from a slightly acid state of the stomach, and may generally be relieved by the same class of measures proper for heartburn. In addition, the mouth may be washed with a little tineture of myrrh in water; or a tea of golden-seal and beth-root (or raspberry leaves) in equal parts. Strong astringent washes should not be used.

Cramp-Colic.—Cramps in the legs are not uncommon at night, during the latter half of pregnancy. There are also ladies who suffer crampings through the bowels, back, breasts, and womb—causing much uneasiness, and painful "knottings" at different parts of the abdomen—particularly at night. A few suffer very sharp cramping and colic pains in the stomach and about the navel; and these may occur at different periods of pregnancy, come on day or night, and become so violent as to oblige the patient

to sit down, bend forward, press upon the abdomen, ete. Each of these forms of cramp, is very troublesome, and the last variety may lead to abortion. They are all more or less dependent upon costiveness, and an acrid condition of the bowels. The liability to them is avoided by the use of the laxative pills or laxative sirup to keep the bowels gently open; by a light evening diet, warm clothing, and provision against exposure. In the second variety, these measures may be further aided by the use of the mother's cordial, or the female tonie, through the day; and if the crampings then occur in the evening, measures must be taken to soothe the nerves and promote a light perspiration. The weight of the womb may also be sustained by the girdle before mentioned. A warm tea of the diaphoretic mixture; or of ginger one part, and white root two parts; or of the anti-spasmodic mixture, may be used somewhat freely; and the patient should lie down, cover up rather warmly, and use a nervine injection as often as necessary. These latter measures (omitting the cordial and tonie, but using the pills and hygiene) will also be appropriate in the third variety of eramps; and to them should be added stimulating applications over the seat of pain, such as fomentations of smart-weed, a wash of cayenne, or the stimulating liniment. Great eare and perseverence are required to give the patient relief from this latter form of cramps. The assafætida or the lobelia pills are often good; and the female tonic should be used for the subsequent weakness and irritability.

Costiveness.—This is usually the result of pressure upon the lower bowel by the enlarging uterus, and is likely to be very troublesome during the latter months of pregnancy. sometimes it is nearly constant through the entire term of gestation. Of itself, it may seem to occasion little inconvenience; but any such tardiness in the action of the bowels, may lead to loss of appetite, headache, restlessness, sleeplessness, melancholy, irritability of temper, indigestion and even severe dyspepsia, cramps, piles, etc. Its occurrence is thus likely to produce derangements that will render the entire term of pregnancy a period of most unusual suffering; yet it is particularly important, as already advised, that no strong eathartics be used to overcome this constipation. Sometimes the inaction of the bowels will be peculiarly obstinate, and then there will be a strong temptation to seek the decisive removal of the difficulty by some violent physic; but this course is unjustifiable, for it will not permanently overcome the trouble, and may produce very bad results. None but mild and relaxing physic should be used, such as black-root, or the leptandrin prepared from it; senna combined with a tonic and aromatic; butternut bark, etc. Perhaps the most suitable modes of using these, are given in the formulas for laxative pills, laxative sirup, and liver pills. But even these articles, though among the most appropriate, should always be used quite sparingly; and the chief reliance placed in the constant use of a suitable diet, and of enemas. The whole series of the ripe fruits should be used with freedom and regularity, such as apples, peaches,

grapes, berries, eherries, currants, pears, prunes, cranberries, etc; but no unripe fruit should ever be used, and it is usually best to stew most of these articles well before eating them. The more succulent vegetables should also be used, as carrots, parsnips, beets (boiled, not pickled,) eabbage, spinach, melons, ete.; but any vegetable or plant that causes griping or other uneasiness, must be avoided. Indian corn, rye, and unbolted flour, are great aids in the same purpose; and so are vegetable soups, veal soup, and veal and mutton among the meats. Fine bread, beef, salted meats, black raspberries, preserves, and plums, are in the list of articles that favor costiveness. The use of a laxative enema each morning, is a most valuable measure; and a timely and regular resort to it, will prove a great comfort and benefit to the mother. A half pint of tepid water, or of catnip tea, or of boneset infusion, are suitable measures of this kind; and should be given at some regular morning hour, say between 7 and 9 o'clock. If these articles do not prove sufficient, an eighth of a teaspoonful of powdered ginger may be added to each injection.

Diarrhea and Dysentery, when they occur during pregnancy, must always be met with great promptness by rest and suitable medication. Jaundice may occur toward the latter weeks of gestation, seldom earlier; and may be relieved by spiced bitters and the liver pills, and an emetic occasionally in severe cases. Dyspeptic symptoms become very distressing to some females; but as they are connected with nausea, heartburn, and costiveness, they may be considered as aggravated conditions of these latter

maladies, and treated accordingly. Vomiting of Blood is occasionally met with, and may create great alarm; but it is readily relieved by lying down, eovering well, putting something heated to the feet, bathing the extremetics (if cold) with pepper and mustard water or stimulating liniment, and taking small quantities of an astringent tea. Warm composition tea, is one of the best; but raspberry leaves, witchhazle, or beth-root, may be used with ginger, or with the diaphoretic mixture. Give small doses every ten minutes, till relieved. A little salted water will often check it.

## DISORDERS OF CIRCULATION AND RESPIRATION.

Excess of Blood.—While some women become pale and thin during pregnancy, very many others get florid, have distinct fulness and hardness of the pulse, swollen veins, bleeding at the nose, dizziness, ringing in the ears, etc. This is ealled a state of plethora. It is most common after the sixth month. It used to be considered that such a condition demanded blood-letting, and that the woman could not enjoy good health or a good delivery, without the use of the laneet. This notion has now passed away among all classes of really intelligent physicians, as one of the absurdities of old ignorance. The difficulty consists not in an excess of blood, so much as in an abundance of blood circulating unevenly. By direeting its flow equally through the system, the bad symptoms eaused by its pressure toward the head, will abate. Warm clothing, warm foot-baths, a cooling vegetable diet, drinks of whey or other diluents, and moderate exercise, will soon relieve the unpleasant feelings. The laxative pills may be used as needed. All tight clothing must at once be exchanged for that which is absolutely loose. Bleeding at the Nose generally affords relief to the head, and need excite no apprehensions; but should it become profuse, a very hot foot-bath, cool cloths to the head, elevation of the arms, cold appliances between the shoulders, holding the head well up, and snuffing cold water, powdered cranesbill, hemlock bark, or other astringent, will soon stop it.

Spitting Blood. - This is a rare affection, but may occur at any period of pregnancy, in strongly sanguine women. It is a difficulty that may prove very serious, and should always receive the most prompt attention. It depends upon a crowding of blood upon the lungs; and is usually provoked by tight clothing and severe exposures, but sometimes results from ulceration or abscess of the lungs, or from consumption. The blood is of a bright scarlet color, and not dark like that which is sometimes vomited from the stomach. The quantity may be very small, merely streaking some mucous spittle, and indicating little trouble; or it may be quite free, and continue till the patient feels weak from its loss. If the patient have small lungs, or had been troubled with cough before conception, bleeding from the lungs is now an occasion of very grave apprehension. It is necessary that these patients lie down, and at once take the most active steps for relieving the lungs from pressure by inviting the blood powerfully outward. All tight clothing must positively be loosened. If the case is very urgent, one or two drops of the oil of fleabane may be given on a lump of sugar, and repeated every ten minutes till other measures can be prepared. Bathe the lower extremities in quite hot water; and follow with stimulating liniment, or a strong and hot wash of red-pepper, mustard, black-pepper, or smart-weed, to the extremities and chest. Cover the patient comfortably, and put hot irons or jugs at the feet. Give a teaspoonful of the diffusive drops in raspberry or beth-root tea every fifteen minutes; or use composition tea; or make a tea of two parts anti-spasmodic mixture and one part raspberry, and give two or three tablespoonsful every ten minutes till the flow ceases. If none of these is at hand, use a warm tea of smartweed and allspice. So soon as the surface becomes warm and moist, the bleeding will cease. To prevent its recurrence, the patient should wear loose and warm clothing, observe strict quiet, avoid exertion and mental agitation, use stimulating washes to the extremities and ehest, go abroad as much as possible, use no coffee, drink a small quantity of cold eomposition tea three or four times each day, and use some spiced bitters or woman's friend. If there is a cough, it should be allayed by the measures elsewhere directed for that difficulty.

Distended Veins.—The veins of the legs very often become distended with blood, which the pressure of the uterus, in the latter half of pregnancy, prevents from returning freely toward the heart. They become large, uneven, tortuous and knotted; are swollen most in daytime, and generally most on one

side; and the swelling disappears on pressure, but returns the moment the pressure is removed. The whole limb is usually more or less swollen at the same time; and the breaking of some of the smallest blood-vessels may cause purplish-red spots and lines under the skin. It is a vexatious trouble to many women; but is not at all serious, unless a vein should get ruptured, and then it may be very difficult to stay the bleeding. It eannot be eured till after delivery; but may be mitigated by lying down, wearing a tight-fitting stocking or a moderately tight bandage wrapped about the limb from the instep upward, using a light diet, and keeping the liver and bowels open by the measures advised for eostiveness. Some women affect to give little attention to this difficulty; and pay for their unwise independence by suffering with varieose veins all their lives, even if they do not have a serious attack of inflammation of the veins or of milk leg after delivery. Should a varieose vein get ruptured, the blood may be eheeked by putting upon the opening some firm substance, and wrapping a bandage about the limb so as to press this substance firmly down upon the vein. It may then be wet every hour or so with a strong deeoction of oak or hemloek bark, and the bandage and compress kept on for several days. The bandage must not be drawn so tightly as to interfere with the circulation below.

Piles.—This trouble results from pressure of the womb upon the reetum, and eonsists of a distension of the veins about the extremity of the bowel. To obviate it, let the bowels be kept quite regular by

leptandrin; and soft by a teaspoonful of powdered elm in a gill of tepid water, used as an injection every night, and through the day if needed. A little lady-slipper in the injection will ease the pain; and an ointment of equal parts of powdered lobelia seeds and beth-root in a little lard, is a soothing appliance. Should bleeding occur, injections of cold water, or of a cold infusion of nearly any of the astringents, will probably check it. Women thus troubled should keep off of their feet as much as they can, wear no tight clothing, and be careful to avoid costiveness. Some women are very much benefitted by the following preparation: solomon seal, comfrey, burdock root, each two ounces; pour on half a pint of hot water, and when cold add a pint of Malaga wine and a pound of sugar. Dose, a large tablespoonful three times a day.

Palpitation of the Heart.—This is properly a nervous symptom, and is dependent upon the nervous sympathies of the frame. At times it becomes very troublesourc—the heart beating so violently against the ribs as to shake the whole body, arousing the patient from sleeping, causing her to stop suddenly if walking, and connected with hurried breathing, giddiness, noise in the ears, and disturbance of sight. Derangement of the stomach and the bowels, and strong mental emotions, are the common causes which directly provoke it. It is best avoided by that course of plain diet which is suitable to costiveness. During the paroxysms, let the lady lic or sit down, as may feel most agreeable to her; loosen all tight clothing; admit free air; and use the anti-

spasmodic mixture, a tea of lady-slipper or scullcap, an assafœtida or lobelia pill every hour, warm footbaths, or any convenient combination of these measures. Let the diet be plain, and the patient pursue that habit of living directed for excess of blood.

Fainting.—Some pregnant ladies are very liable to faintings, particularly about the date of quickening; and an attack of it may be provoked by very trifling circumstances, such as sudden noises, unexpectedly hearing a person speak, a movement of the child, etc. Some grow so peculiarly sensitive, that strong odors, even those that are agreeable, may cause them to faint. Many faint because their clothing is too tight. Sometimes the tendency recurs at regular intervals. At the attack, the heart first palpitates for a moment, then the patient becomes pale and unconscious, the lips become bloodless, the pulse then nearly disappears, and breathing is very feeble. In from one to five minutes, breathing, pulsation, consciousness, and color, return; the face may flush a little; and a little vomiting may follow. During the paroxysm, lie the patient upon her back with her head low; loosen every tight piece of clothing about the neck and waist, admit plenty of fresh air, and fan gently; rub the chest briskly with a rough, dry towel; sprinkle some cold water in the face. Should unconsciousness be protracted, the arms, hands, and lower extremities, may be bathed with any convenient stimulant. After the attack, the female tonic may be used, with a couple of assafeetida pills at night; and the bowels should be kept regular by the laxative pills or sirup, the diet made plain, exercise taken in the open air, loose clothing worn, and coitus avoided.

Shortness of Breath.—This may occur at any period of pregnancy, either from nervous irritation in the early months or from the upward pressure of the uterus in the latter months. It may become so extremely distressing as to prevent the woman from lying down, and to produce a feeling of suffocation. Any mental excitement, bodily fatigue, or hearty eating, may provoke it. During the early months, when dependent upon nervous sympathies, it is generally relieved by assafcetida or lobelia pills, the antispasmodic mixture, lady-slipper or scull-cap infusion. If the patient is very plethoric, pursue the course directed for excess of blood. When mechanical pressure causes it, wear the loosest clothing, use the plainest diet in small quantities, avoid all foods which may cause wind in the stomach or bowels, keep the bowels a very little loose by laxative pills or leptandrin, use enemas of elm or clm and boneset twice a day, refrain from heavy and continuous labor, and keep the easiest and quietest position. No permanent relief can be obtained till after confincment.

Cough.—A pregnant woman is often troubled with a nervous cough—chiefly during the first months of gestation, and accompanied by more or less shortness of breath. It may be almost constant, or may recur in paroxysms; it is short, "hacking," causes no mucous expectoration, and is very troublesome. Depending upon sympathy with the womb, it needs the use of nervines with expectorants. I have found

much satisfaction in using an ounce of tincture of lady-slipper and half an ounce of tincture of lobelia in a pint of the female tonic; giving a teaspoonful at a time every two hours, hour, or oftener. Or take four ounces of spikenard root, one ounce each of comfrey and cherry bark, and half an ounce each lobelia herb and blue-eohush; pour on the whole a pint of warm (not boiling) water, and when cold, add a pint of Madeira wine and half a pound of sugar. Use a teaspoonful every hour or oftener. If the eough then remain dry, the quantity of lobelia may be doubled. In the latter part of gestation, the cough may be eaused by the viseera pressing upward upon the lungs; and this will always lead to mueous expectoration, perhaps to streaks of blood in the spittle, or even free spitting of blood. It often causes soreness of the throat, headache, and feverish feelings; and may prove serious by inducing chronic disease of the lungs, or provoking abortion. This form of cough should always receive prompt attention. The clothing must be loosened, the bowels gently opened by the liver pills or leptandrin, the feet bathed each night in hot water, stimulating liniment or cayenne wash applied to the feet and ehest night and morning, water of elm or marsh-mallows used somewhat freely as a drink during the day, and the second of the above eough preparations used. No eircumstance should allow such a patient to continue in a house that is either damp, dark, or elose; and rest, fresh air, and sunshine, are absolute necessities.

Dropsy.-From the pressure of the uterus upon

the vessels which return the blood from the lower extremities, the circulation in these parts is much impeded; and this may lead to a dropsical swelling of the limbs. The limb swells, is cold, looks white, pits upon pressure, and gets worse toward night. begins first about the instep and ankles; rarely extends above the knee; but may reach the hips, the labia, and even extend to the abdomen. Feeble and lymphatic persons are most liable to it, and it occasions little inconvenience beyond a sense of weight, or clumsiness in sitting or walking; but when it affects the abdomen, it undermines the general health and interferes with the natural advance of pregnancy. When caused solely by uterine pressure, the weight of the womb may be supported by the suspensory bandage before mentioned, the bowels kept gently open by the laxative pills, gentle and dry friction practiced on the limbs, and the patient directed to lie down several times during the day. If the labia become so large as to threaten much difficulty during labor, the fluid may be discharged by slightly puncturing them with the point of a lancet. The strength of the patient should always be sustained by some tonic, as the spiced bitters; and the function of the skin promoted by gently sweating drinks like ginger or Greek valerian in tea, and by tepid baths followed by good friction. It is very improper to attempt the treatment of such cases by free catharties and strong diuretics; for these measures will not effect a cure, and the cathartics may provoke abortion while the diuretics produce weakness. When the dropsy affects the abdomen or the whole frame, it is dependent upon disease and not upon pregnancy; and the treatment then appropriate for it will be found in my Handbook of Medicine.

Derangements of the Urine .-- Some ladies are greatly annoyed by being unable to keep their urinewhich must be discharged upon instant demand, or else will pass involuntarily. It is also voided very often, and generally with much sealding and itching about the external parts. In the first months, this arises from sympathetic irritation; in the latter months, from the irritation caused by the pressure of the womb upon the neck of the bladder. To relieve it, keep the bowels gently open; drink freely of cold infusion of cleavers, mallows, water-melon seed, or elm bark; use an enema of powdered elm, or elm and lady-slipper, to the bowel every six or twelve hours, and retain it; and an injection to the vagina of a little golden-seal and raspberry leaves in elm water, is often a great advantage. Coitus should be avoided. When arising from uterine pressure, little can be done but wait patiently for confinement.

The very contrary of the above condition sometimes occurs, and the woman can void her urine only with great difficulty. When this occurs from spasmodic contraction at the neck of the bladder, use half an even teaspoonful of powdered lobelia herb in elm, as an injection to the bowels; retain, and repeat it every three or six hours, as needed. Also give a lobelia pill once an hour, and use any of the above demulcent drinks. When uterine pressure

causes the stoppage, relief may be obtained by the previously-named suspensory bandage, or by changing one's position when in the attempt of passing urine; but sometimes nothing will avail but the introduction of the catheter three or four times a day. This any woman can easily do for herself-using a small flexible catheter in preference to the metal one, oiling it well, warming it a very little, and inserting it carefully through the external opening of the passage from the bladder, called the meatus urinarius. (See description of the organs). The woman should sit or "hunkey" down, when introducing the catheter; and pass it upward gently, and with a slow twirling movement. If she can not succeed readily when sitting, let her lie down upon her back, and introduce it while in that position and after a few minutes rest. The mouth of the urethra, or waterpassage, is sometimes very much swollen from the pressure of the uterus; and if this fact is forgotten, it may occasion a needless fright lest the prominence is some tumor. The passage itself is less than two inches long; and in the latter months of pregnancy, when the rise of the uterus has lifted up the bladder, the direction of the passage will be quite perpendicular.

# ABORTION.

Abortion, or miscarriage, means the birth of a fœtus before the end of the sixth month of pregnancy. It most commonly happens between the third and fourth months; but may occur at any period. A child born after the sixth month, and before full term, is called a premature delivery.

Causes .- This accident is commonly provoked by violence, as lifting, jumping, running, falling, daneing; blows or falls upon the abdomen; exhausting labor or other effort; violent mental emotions; too frequent amorous indulgence; active purging, etc. It is also provoked at times, by such acute maladies as small-pox, inflammation of womb, severe fever, dysentery, etc. Very many times, the more violent of these causes will effect no harm, unless some constitutional influences have been operating and inelined the woman to misearriage. Among these latter influences are: a sickly and irritable body; seurvy, rickets, syphilis, eancer, asthma, dropsy; impoverishing diet; living in marshy or other unhealthy localities; indolent and luxurious modes of life; ehronic uterine disease, as malignant ulcers, displacements, and tumors; tight lacing. A previous misearriage disposes to abortion at the same period, in any subsequent pregnancy; yet it may be escaped. These constitutional causes may lead to misearriage, without any direct violence. Death, or serious disease, of the ehild may be the eause of an abortion

Too many times, abortions are produced purposely—by mechanical violence, or harmful agents. It is a very great mistake to suppose there is no harm in this, if done before the date of quickening. Life eommences at the moment of eonception; and the medical and legal professions so pronounce it, and make it a *criminal* act ruthlessly to destroy this life. Let no love of gain, therefore, entice the physician to destroy a human being; and no fear of suf-

fering or toil cause a mother to take the life of her own offspring. Even to hide shame, this is an act without justification; for penitence, and not murder, can alone cover adultery. In some remarkably rare instances, the physician may decide that forcible delivery is needed; but his own honor demands that he should then *always* call in counsel, or else state his grounds for action before two competent and disinterested witnesses.

An abortion is always likely to produce weakness of the uterine organs, and constitutional disease. Occurring from previous constitutional disease, it causes least suffering and danger; but the danger is greatly increased, when any violence is the provoking cause. When willfully induced, the danger is generally greatest; death not unfrequently follows; and prolapsus, ulceration, shattered nerves, and weak lungs, nearly always burden the survivors the rest of their days. Many women die in these criminal attempts, without passing the fœtus. Many of the most sickly, suffering, worthless, and brokendown women in cities and large towns, have shattered their constitutions in outrageous efforts to avoid "raising a family."

Symptoms.—Hemorrhage, sometimes light, sometimes so great as to endanger life, sets in suddenly when miscarriage is provoked by any violent cause; and this continues till the fœtus and secundines are discharged. There are pains, as in labor—severe in proportion to the age of the fœtus. A free, persistent, and very weakening lochia, is likely to continue many weeks after this miscarriage.

When the result of some disease of the womb or fœtus, it may occur as a moderate hemorrhage, if before the second month. If in the fourth month, or later, there may be chills and lassitude for several days; with paleness, palpitation, and fœtid breath; while flaceid breasts, sinking abdomen, sense of weight in the pelvis, absence of the child's motions, and thin, bloody discharge from the vagina, are soon followed by the pains of labor. The pains may be severe; but the danger is not at all so great as in the previous class of cases.

When a fœtus dies, it is usually expelled in a few days; yet it may remain for weeks or months, and be discharged piecemeal. Such patients remain feeble, but not always prostrated. In rare cases, the fœtus has passed into a fatty or fleshy mass, and remained in the womb indefinitely.

Treatment.—The liability to miscarriage, may be overcome by the habits of life. Nervous women should guard against every bodily and mental agitation; the weakly use a plain and nutritious diet; the melancholic and sedentary have company and go visiting; and the plethoric use a light and mostly vegetable diet, and have daily labor. The residence should be in a dry and healthy position; and tight lacing, strong physic, heavy work, harsh food, and free cohabitation, must be strictly avoided. The general health should be sustained, when needed, by mild medicines. The female restorative is a very suitable tonic and nervine; or equal parts of cherrybark, golden-seal, and beth-root, with half a part of ginger, may be prepared and used as the restora-

tive. For biliousness and costiveness, use a grain or more of leptandrin in the evening; and an injection of tepid water in the morning. A cold skin may be bathed as needed with a strong water of pepper or mustard; and a little warm composition tea used three or four times a day. Should the health still fail, the eyes look pearly, or the skin get sallow, the patient should keep off of her feet, and at once take an emetic—using plenty of composition tea. It is the most powerful of all measures to relieve the uterus, stomach and liver, and avert a threatened abortion. The danger lies in not using such an emetic; for there is no danger in using it, nor in repeating it as often as necessary, with suitable tonics after each.

If hemorrhage set in, let the patient lie on her back on a hard bed, with the head level. Relief then depends upon getting the blood freely and promptly to the surface; and hence the appliance of cold water (so common in many places) only injures the lady by forcing more blood upon the uterus, whereas the excess already there is the cause of the flooding. Bathe the limbs and feet in a strong and warm infusion of red-pepper, mustard, black-pepper, smart-weed, or prickly-ash; and put heated bricks or irons at the feet and beside each hip, covering the patient suitably warm. From one to three drops of oil of fleabane, on sugar, may be given; and repeated every ten minutes till other suitable remedies ean be prepared. A tea of black-pepper is a good domestic remedy; one of allspice is very valuable, and may be used freely; and one of nutmeg is some-

times used, but is not very suitable, as large quantities are injurious. From half to a whole tablespoonful of diffusive drops, in two or four tablespoonsful of strong raspberry tea, is a valuable remedy; and may be repeated every fifteen or twenty minutes. A rather strong and warm tea of composition, four tablespoonsful or more at a time, is among the best of remedies. Two parts each of ginger and prickly-ash, and one of beth-root (or raspberry, or witch-hazel, or geranium, or bayberry), is very good. If the patient is restless, add a little lady-slipper, seull-eap, or wild-ginger, to any of the above teas. If the flowing is very free, add onetenth part of red-pepper to any of them; or a tea of the red-pepper alone, if no astringent is at hand, makes a most efficient and reliable agent for all such eases. The dose of any of them is to be repeated every sixty, thirty, fifteen, or ten minutes, according to the urgency of the symptoms. In very severe eases, where the lips get blue, and the eheeks and fingers cold, and the patient inclines to faint, strong eomposition tea, with one-sixth part more of eavenne, is the best, and may be given in doses of two tablespoonsful, or more, every five minutes; and the quantity diminished, and the intervals lengthened, as the patient rallies. Great perseverance is necessary, in bad eases of flooding.

If the bowels have been confined, unload them with an injection of ginger in starch water; and follow this with injections of an even teaspoonful, or more, of lady-slipper, and one-eighth of ginger, in starch water—to be retained, and repeated every

three or two hours. A tea of beth-root or geranium, cool, may be injected into the vagina every three or four hours. If the flowing then become too persistent, an emetic must be given. A most suitable form, is to infuse equal parts of lobelia and composition; give from four to eight tablespoonsful every ten minutes; and when considerable nausea is produced, use freely of composition alone, till free vomiting ensues. Very unpromising cases are often arrested thus; and if the miscarriage have taken place, most serious hemorrhage can sometimes be relieved only by this measure. In very bilious and relaxed patients, when the flowing continues steadily for many days before abortion, such an emetic may have to be repeated every day, or second day; with any of the above teas between them. An even teaspoonful of the mixed powders of golden-seal, prickly-ash, and unicorn (helonias), may also be given three times a day.

The threatened abortion is averted as the hemorrhage is arrested; hence the above treatment is directed so largely toward the latter point. If the miscarriage can not be avoided, as made known by the dilating mouth of the womb, it becomes a case of labor, and must be managed as such. The above measures will meet the flooding, or the protracted hemorrhage, after the expulsion of the fœtus; but additional measures therefor, will be found under the head of Profuse Menstruation and of Flooding.

# CHAPTER IX.

# CHILD-BIRTH.

#### PREPARATIONS FOR CONFINEMENT.

Labor a Natural Process.—With the signs of approaching labor, pregnant women are apt to become agitated; and to go about preparing as for a work of extreme danger. Their fears are as groundless as such preparation is unnecessary. If they have pursued regular and temperate habits of life during gestation, and have done nothing to injure their health severely, they may rely with confidence on the resources of nature to carry them safely through their confinement. When left to herself, nature's efforts are always adapted to the constitution of the patient; and adapted also to the state of those delicate and sensitive parts, which would suffer grave injury from sudden or ill-timed violence. All that is required of woman in labor, is a patient waiting on the course of nature's operations. The steps by which nature advances to her great ends, are sometimes slow, but are always safe; and can not be hurried or disturbed with impunity. And it is particularly true in child-birth, that those who are most patient actually suffer the least.

It has been much the fashion, of late years, to insist upon it that a highly civilized woman can as well have a nearly painless birth as can a savage Indian. This is absurd; for Indian women do suffer pain,

only their great physical strength enables them to endure it better and rally from it sooner. If, for generations, the Caucasian race would follow the habits of the Indian, and cultivate bone and muscle at the sacrifice of brain, our women could also nearly approach the brute in their indifference to the pangs of travail. It is not likely, however, that white women will voluntarily sink themselves into barbarism, for the sake of bearing children with ease; therefore, so long as civilization refines and intensifies the nervous system, so long will child-birth be an oceasion of suffering. Yet, by regulating the habits of life according to the rules which have already been laid down as proper to secure a healthy womanhood and a quiet pregnancy, the pains of delivery will be much lightened and the liability to aceidents greatly lessened. Those regulations will develope bone, muscle, nerve, and mind, in a harmonious manner; and thus seeure the greatest physical strength and power of endurance that are compatible with a high state of civilized culture. With the preparation for labor which such habits of life will give, the woman can approach this emergency with a calm consciousness that all will be well with her.

And the prospective mother may comfort herself by such facts and considerations as these: That nature has, from the hour of her own conception, been fitting her for these very duties; and the wonderful life-power which could mould her perfect body from so small a germ, and establish her organism and its peculiar functions with such certainty, and develope the child within her womb so regularly and

without error, is fully equal to the completion of its task. A power which has shown such astonishing capabilities through the years of her life and the months of her pregnancy, ean not be expected to fail in the last hours needed to finish the work it has thus far earried on so well.

When labor approaches, all the energies of the frame are eoneentrated—so far as they may be needed—upon the womb, for its present duties. The superlative wisdom, which dictates to a day the commencement of labor, also directs that the uterus shall now receive all the strength it needs to earry out its purposes. Hence, of all the vast wealth of vital energy that is stored among the thousand recesses of the frame, each organ now gives up a portion to the aid of the expulsive efforts. And when this mass of power is thus concentrated, and used with a divine skill which the mind of mortal ean not comprehend, its force is truly amazing. It removes all obstacles, and overcomes all opposition; for nature does not design a failure. Let the woman confidingly trust herself into the hands of her Creator, and rely upon the provisions which He has made for her in this hour, and she will find herself endowed with strength quite equal to her necessities.

And let her also take eourage by reflecting upon the fact that the great majority of labors are perfectly natural, and require no help whatever merely watching, timely encouragement, the removal of the child, and the after care of the woman. Out of 20,000 confinements, not three hundred will need any material aid; and those who need aid at all, will require little except simple and harmless assistance. Very few eases present any embarrassing eomplexities; and while medical attendance is a most proper preeaution, the woman should understand that the liability of "anything going wrong" is extremely limited.

Assistants.—The assistants of the lying-in room should be as few as possible. The attending physieian (or mid-wife), the nurse, and one female friend, are sufficient. More would but be in the way; or do misehief by their doleful tales or silly talk. As good, sensible, old Dr. Buehan has remarked: "To say nothing of the noxiousness of the breath and perspiration of several people in a close room, the officious folly, the silly tattle, the inconsiderate language, the fluctuating hopes and fears aroused in the lady's mind by so many gossips, must be productive of the very worst effects. Let me, then, conjure pregnant women never to comply with the request, however well meant, of their female friends, to be sent for the moment labor commences. They are sure to do some harm, and it is impossible for them to do any good. The lady will find quietness and eomposure of far greater service, than the noisy rallying round of a crowd of friends-whose conversation is generally such as to awaken and eherish needless ideas of danger." An apt physician generally wishes but one female to be present, with one or two more in reach for an emergency; and every physician of good judgment depreeates the plan of

making these the occasions for neighborhood gather-

ings.

A lady will consult her own interests by advising her physician beforehand as to the probable need of his services near a given time. The physician called, should, if possible, be one with whom the lady is familiar; and one on whose knowledge, Christian uprightness, ealmness of mind, and gentleness of manner, she ean place reliance. An ignorant, pompous, vulgar, bustling, or lewd physician, is extremely out of place in a lying-in room. If a midwife is seleeted, slie should be a woman noted for her calmness, firmness, and good sense; and one who has given these subjects a patient study, not taken up such duties in presumptuous and self-conceited ignorance. The implicit confidence of the lady in the judgment of her accoucher, is a matter of the very first importance.

A really good nurse is often very difficult to procure, for too many of them are quite ignorant, and at the same time very opinionated; and as their duties extend to the child as well as to the mother, and continue for many days after confinement, they perform a very important part. A good nurse should be healthy, strong, very quiet, calm, not "nervous," and not given to much or loud talking. A nurse of strong self-conceit, will be very apt to "have her own way" at some time when that "way" may be very harmful to the woman or the child. She will be apt to disobey the physician's orders, or add some of her own plans to them; and thus work mischief when he alone is held responsible. No such nurse

should ever be employed, under any circumstances, and especially during confinement; but one should be selected who, while she understands her business, has both judgment and principle enough to obey the physician's orders, to never give any medicine or class of food against his direction or without his knowledge, to send promptly (but without alarming the lady) for the medical attendant the moment an emergency arises, and to act with calmness and good sense in the case till he arrives. Such a nurse is worth twice the wages, and ten times the confidence, of one of the opposite class. When possible, employ a nurse who is acquainted with the physician or midwife who is expected to be in attendance, and in whom the physician is known to place confidence.

The lady friend who is selected should be a matronly, calm, quiet, patient woman. Firmness with gentleness are as necessary in both the nurse and friend, as in the physician; and a talkative or fussy woman, should not be admitted to the room. This friend should also be acquainted with the physician; and always, if at all possible, of his views upon medical systems. When accoucher, nurse, and female friend, are acquainted and "work together," all will be well in that chamber.

Arrangements of the Room.—The room should be in a quiet part of the house, light, and capable of good ventilation. It should be kept at a summer warmth; and provided with blinds for thorough shading, when this becomes necessary. The clothing for the woman and her babe should all be taken out of the drawers, well aired, and hung in a convenient

place. This remark applies also to the woman's bandage, one or two extra sheets, a cradle-blanket or half sheet, one or two extra pillows of small size, and an extra quilt or double blanket. Three or four fresh towels, plenty of water, and castile soap, should be at the wash-stand. A piece of strong bobbin, a spool of strong white cotton, and a pair of sharp, moderate-sized scissors, with blunt points, should be placed on the candle-stand near the head of the bed; and also a little sweet lard and a vial of sweet oil. Plenty of boiling water should be near at hand; and an uncovered bed-vessel about the middle of the bed, under the side occupied by the accoucher.

Personal Arrangements.—A lady expecting to be confined, should avoid the use of hearty and stimulating food. When the approach of labor is noticed, she should take especial care not to load the stomach, nor to use any but the lightest diet; for a full stomach is now a decided inconvenience, and will retard delivery in most cases. During a quick delivery, no nourishment is allowable; but a slow labor may make sustenance necessary, and then some gruel, porridge, or light broth, may be used. Some feeble women require a bowl of broth and some bread in it, or a similar light meal, when they feel labor coming on. The patient may be allowed water, mint tea, or mallows or gum water, to drink; but coffee, chocolate, and every form of spirituous liquor, should positively be forbidden, no matter by whom recommended.

The woman should always have her bowels moved and the urine evacuated, before taking her bed. If these can not be effected by a natural effort, an enema of tepid water, or else of flaxseed or elm, should be used; and the urine must be drawn by an elastic catheter, if it will not otherwise flow. The dress of the woman should be light, and but moderately warm. She should not have on drawers; but may keep on her stockings without garters, especially in cool weather. Besides the ordinary under garment, she may have on one thin woolen petticoat, tied very loosely; and over this a loose gown, unbuttoned at the neek and wrists. Nothing should be tight about her; and when she lies down, the skirt should be untied.

The Bed.—About the best arrangement of the bed, is to place two compact straw mattresses upon the bedstead; spread upon these a sheet; over the middle of this sheet spread and fasten down a large piece of india rubber, or oiled cloth, or pliable leather; upon this lay a thick comforter folded; and then over all another sheet, with bolster, pillows, etc. The folded comforter and the piece of rubber will prevent the under sheet and bed from getting soiled; and after the woman is confined, the rubber and all above it may be removed, when she will be settled upon a dry bed with very little handling-a point of much advantage to her. A half bedstead is most convenient, when in the house. The bedstead should be on rollers; and moved a little from the wall, so that an assistant ean pass freely around it.

A woman must suit her own convenience as to the time when she lies down. Some like to sit in a chair, or walk about the room, till labor is well advanced;

while others wish to lie down at once. In tedious labors, a woman may sit up or be about the room, whenever she feels like it. Some women never wish to lie down, but are delivered upon their knees on the floor, while leaning upon a chair, or sitting, or even standing.

When the woman lies down, her loose-gown and under garment should be rolled smoothly up above her waist, and the loosely-tied petticoat alone brought down over the pelvis and limbs. This will leave the woman unburdened, and the physician unencumbered when he attempts to render assistance; and as the skirt alone will get soiled, it may be removed with the rubber and comforter after labor, and leave the dry garments then to be brought down. The woman should lie a little down from the head of the bed, so that her feet can easily press against the board of the foot-piece; and her shoulders and head should be raised to a gentle inclined-plane with pillows. One of the best positions is upon the back, near one edge of the bed; with the knees well lifted up, so that the accoucher can pass his hand under the thigh when he offers assistance. Some ladies prefer to lie upon the side, with the knees flexed toward the abdomen, and a small pillow or roll of muslin between the limbs to separate them. When lying on her side, her back should be close to that edge of the bed occupied by the physician.

# LABOR.

Premonitory Signs.—Many women searcely have any warning of the approach of labor, while some

LABOR. 301

have a few reliable evidences of it, and others have a series of well-marked signs. When a lady is careful in watching herself, she will not fail to notice that the size of the abdomen is lessened, and its roundness flattened; and that the uterus and its contents have fallen low in the pelvis. This always takes place before labor comes on-sometimes but two or three days; in others, ten days or more. This sinking of the uterus relieves the upward pressure upon the stomach, so that the appetite, digestion, breathing, and palpitation of the heart, are much improved. The woman feels easy, recovers her gayety, feels disposed to unusual activity, and looks upon her confinement as far off; hence it is not uncommon for an inexperienced person to be greatly astonished to find a sudden access of "colic pains" is the beginning of labor.

The motions of the child are often quite lively, even painfully so, for many days before labor; though they many times almost cease for a day before pains commence. The sinking of the womb, by pressing upon the rectum and bladder, provokes a frequent desire to pass water and go to stool. In a few instances, the irritation of the bladder becomes very annoying. Slight swelling of the labia, and a discharge of glairy mucus from the vagina, are also common. There are also, at times, transient neuralgic pains about the hips and loins; and in some cases, the early descent of the child's head may exert such a pressure upon the parts, as to cause a sense of numbness, or even a feeling resembling paralysis, in the lower limbs. These sensations need not cause

the woman any anxiety; for they are caused by the child's head, and will soon disappear after labor.

In many instances, especially in the first pregnancy, the womb will have paroxysms of slight contractions for one, two, or even three weeks, before confinement. These contractions occur at various times of both day and night, give a sensation of uneasiness, and pass away in a few minutes. On placing the hand upon the abdomen while these sensations are present, the womb will be felt contracting, or tightening, into a hard lump or knot-generally at one place at a time. As the unpleasant sensation passes off, the contraction will be felt giving way. There is no certainty as to the frequency or length of such contractions; but sometimes they return each evening, and amount to pretty sharp pain, for many evenings in succession. These feelings may occasion much anxiety in the patient's mind; she may anticipate immediate labor, and its delay may cause her to look upon these contractions as an evidence that something is wrong, and she will then become depressed with apprehensions of the future. All such fears may at once be dismissed; for these contractions do not forbode evil, but are generally the harbingers of good, from the fact that they gradually prepare the uterus for its labors and thereby render delivery shorter and less painful. Dr. Bedford, in his valuable work upon Obstetrics, gives this advice to his classes for such cases: "It will be your duty at once to dispel all apprehension, and assure the lady (which you can do with entire truth) that the greater this local disturbance previous to the partuLABOR. 303

rient effort, the more auspicious will be the delivery. I have remarked, as a practical fact worthy to be recollected, that, all things being equal, labor will be shortened and more favorable just in proportion to the activity of these contractions." The general experience of the profession will confirm these remarks of Prof. Bedford.

Labor Pains.—As has just been intimated, wandering and irregular contractions of the womb sometimes give full warning of approaching labor; while in a great many, the pains of travail come on quite suddenly, and when not expected. An inexperienced mother often imagines she has a colic, and she takes cordials and warm teas to cure this colic, and makes quite a disturbance about the house and among the neighbors in trying to relieve a colic which astonishes her by its persistence, and does not find out her mistake till the doctor or an experienced matron has detected the true state of affairs. A young mother always feels mortified at such a blunder on her own part, though her unfamiliarity with labor-pains will readily excuse her; but as a real colic, or neuralgia, or indigestion, or some other difficulty, may provoke pains much resembling those of actual labor, it is valuable to know the true from the false.

True pains are always connected with contraction of the uterus; and by placing the hand upon the abdomen, this contraction can be felt to harden the entire abdomen during, and a few seconds before, each pain. These pains are not severe at first, but gradually increase in severity; they usually commence in the back, and pass around to the thighs

and lower pelvis; and they occur at regular intervals, with a period of ease between each—each pain lasting but a few seconds at the outset; but the duration of the pain lengthening, and the time between shortening, as labor advances. As the pain subsides, the hardness of the abdomen relaxes. False pains do not occur with any regularity; are not likely to leave a period of ease between them; and never are accompanied by uterine contractions, or by the peculiar hardening of the abdomen caused thereby, which arc so noticeable in true pains. If false pains are provoked by fatigue, they will cease by rest and the usc of a tea of ginger and lady-slipper; if by costiveness, a large tepid enema of boneset or catnip tea will give relief; if by the contraction of cold, the diffusive drops, in catnip or balm tea, should be used; if by sourness or flatus in the stomach and bowels, let the neutralizing cordial be given; and a tea of anise seed, or peppermint, or ginger, used warm.

The pain of labor is not situated in the contracting part of the uterus, but in those parts which are distended in consequence of the child being pressed against them. On this account, all the pains are not alike during delivery. In the first place, the uterine contractions have to force open the mouth of the womb, and make a passage for the escape of the child. The pains that accomplish this, the first stage of labor, are mainly located in the lower part of the back, and across the hips; they very seldom cause any uneasiness across the front of the pelvis; are of a peculiar sharp character, usually called "grinding" by women; and are not accompanied by any

LABOR. 305

bearing-down. It is necessary to remember the latter fact; for so long as these grinding pains continue, it is quite out of place to direct a woman to "bear down, and help nature," because such efforts can do no good whatever. They can be made only by a forced straining, and they exhaust the woman's strength before she reaches that stage which will demand bearing-down efforts. The grinding pains are very annoying; the woman often becomes despondent, and extremely irritable during their continuance: and sometimes they continue for many hours-the dilation of the mouth of the womb going on very slowly. Every prospective mother should fully understand the nature of these pains; and also know that they must be allowed their full time, that slowness in this stage of labor is no occasion for uneasiness or anxiety, that no straining on her part can do anything but weary her, and that any attempts to urge progress by medicines or instruments or the hand, would but result in fatigue and injury.

When the mouth of the womb has been well dilated by the grinding pains, the efforts naturally begin to be strongly propulsive; and then the pains will extend (in nearly all cases) quite around the body, and presently settle strongly in front of the pelvis. The pains increase in force and frequency, and their propulsive force becomes very strong. Nature now calls loudly upon the woman to "bear down" of her own will; and so urgent is this demand, that the woman cannot avoid making such efforts. It is also noticeable that the despondency and irritability which may have troubled the patient at the outset, now pass

off; and she becomes more vigorous, and more in earnest, till delivery is completed.

It has been remarked that the pains gradually increase in severity and frequency, as labor advances. The first ones may last for but fifteen or twenty seconds, and have between them an interval varying from fifteen to thirty minutes. Before the mouth of the womb is so dilated as to let the bag of waters break, the pains may have increased in length to one minute, or a minute and a half (though seeming to the patient like several minutes); and the intervals between the pains may have shortened to but three or five minutes. The earlier bearing-down efforts of the woman, have now become quite strong; her face swells and turns red with the exertion of each pain; and though each pain accumulates its force gradually, and dies away gradually, the few moments that the effort is at its hight, are moments of tremendous effort. As the child's head advances through the vagina, and presses against the soft external parts, the pains become almost continuous, and are full of cutting agony; but, fortunately, it requires only three or four of these to pass the child's head into the world. The suffering of the later pains, after the discharge of the waters, is referred to the lowest point in front of the abdomen, and thence back to the lower end of the sacrum; and at last is confined to the perineum and the soft parts.

Changes in the Parts.—When the mouth of the womb begins to open, there is a little blood streaked with the glairy mucous already discharging; and this is called the "show." It continues, more or less

LABOR. 307

abundantly, during labor; and is of service in lubricating and softening the passages. If the forefinger of one hand be well oiled with lard or sweet oil, the nail pared quite close, and the finger introduced to the vagina, the lower end of the womb will be found within easy reach; and its mouth will be traced as a thin, tense ring, or opening. This opening may be no longer than a pea, when first felt; but gradually increases to the diameter of a cent, of a silver dollar, and finally to a width sufficient to let the child's head pass through. The finger should never be introduced for an examination while a pain is on; and if a pain come while it is within the vagina, it must neither be withdrawn nor removed. Each pain presses the bag of waters and the fœtus down upon the slowly-opening mouth of the womb; a portion of the waters gets pushed down into a piece of the sac, before the child's head; and this pouch of the sac forms nature's own admirable wedge for gradually separating the fibres of the os tincæ. This pouch feels soft and yielding, when the pain is off; but when the pain returns, the pouch is forced down violently, and becomes extremely tense. It protrudes half an inch or more beyond the mouth of the womb, at each pain, after this part is pretty well dilated, and sometimes comes almost to the edges of the labia; but it recedes when the pain passes off. As the dilation becomes complete, the edges of the mouth of the womb become thin, and separate widely around against the brim of the pelvis. When the dilation is complete, the sac of waters breaks during a pain; and all the water that is below the child's

head, is discharged with a sudden and foreible gush. The quantity thus lost, may be considerable; but need cause no alarm either to the lady or her nurse. Most women lie down before the labor has advanced so far; but if a lady have not taken her bed up to this time, it is now most proper that she should do so at once, unless previous arrangements have been made for her to be delivered off the bed. As a eommon rule, the efforts of parturition draw to a elose pretty rapidly after the discharge of the waters; but this should never tempt any one foreibly to break the sae with the idea of hastening labor, for such an interference with nature's own provision for dilating the parts, would at once retard progress -perhaps render the rest of the labor extremely tedious.

When the waters have broken, the child's head begins to pass from the womb into the vagina. When its largest diameter comes to the oval formed by the brim of the pelvis, the advance is slow; but when this has been passed, the progress is quite rapid. When the head gets so low as to press powerfully upon the rectum and the bladder, it will force from these parts any excretions they may contain. As the head presses upon the perineum, it forces it strongly downward, and forms what is called a "tumor" at this part; and as the head is about to emerge from the labia, the entire perineum is put greatly upon the stretch. After the head is born, there is often a lull of a few seconds in the pains which had just before been almost continuous; and

then a light pain or two more, expel the shoulders and the rest of the body.

Constitutional Effects of Labor.-It can not be otherwise than that such a wonderful concentration of vital effort upon the womb, will cause a variety of impressions upon the woman's frame. Some women vomit with the pains, in the commencement of labor-especially if the stomach be full. feeling itself is unpleasant, but no danger need be apprehended; for the nausea will half relax the mouth of the womb, and thus may actually benefit the lady by hastening dilation. Should the stomach be very sour, and the vomiting continuc very long, ten grains of soda may be dissolved in a gill of very weak spearmint tea; and from two to four teaspoonsful of this given every five minutes. When the bearing-down pains get strong, it is not uncommon for the woman, between each pain, to fall into a sleep almost as deep as a stupor. This is a great benefit to her, and must not be disturbed. Instead of falling quite asleep, some women will remain awake, but lose their full senses and talk somewhat at random for a few moments, and perhaps stare wildly and make some strange motions. This occurs generally after the waters are discharged, and looks a little terrifying to an inexperienced person, or an anxious friend; but the fact that the lady is perfectly conscious at the very next pain, may put all anxiety completely at rest. The pulse is increased in frequency, and sometimes runs up to a hundred or more per minute; while the heart may beat somewhat violently at times. The heat of the body is

also increased; and it is usual in the latter part of the labor, for the upper portions of it to perspire freely. These excitements are too natural to require any treatment, except to regulate the room and the clothing; though if the pulse and heat rise, and no perspiration appear, some of the diaphoretic mixture, given warm and in moderate quantities, will soon procure moistness and relief. Tremblings or shiverings, of a nervous character, sometimes seize the woman a little before the child is born; but they need cause no alarm, for they are soon at an end.

Duration of Labor.—The majority of all labors terminate within six hours, and a large number of them within four hours. There is, however, no certainty about this; and a perfectly natural labor, without the least unsoward accident to mother or child, may not be terminated under twelve, twentyfour, or forty-eight hours, or even more. A woman who has had children, other things being equal, may expect a shorter time than one who has had none; and a woman bearing her first child before her sixteenth year, or after her thirtieth year, commonly has a tedious delivery. So many unknown circumstances may hasten or delay the progress of parturition, that it would be quite a mistake for a midwife to promise the lady a given hour for the completion of her troubles. Let the woman be sustained by every assurance, and every gentle and prompt attention; but better never unsettle her mind by exciting a hope which may not be realized.

### POSITIONS OF THE CHILD.

Natural Presentation.—By far the great majority of children are born with the head presenting, and this is therefore considered natural. The buttocks or breech presents many times, and other parts also present; but these are the unusual eases, and are the proper studies for the physician, rather than for the nurse or midwife. When the head presents, with the top toward the mouth of the womb, it may be known by its hardness, smoothness, and oval shape; but this can not be detected till the mouth of the womb has dilated considerably.



First position of fœtus. Crown toward the left hip-socket. Head just descending into the rim of the pelvis.

As the child descends toward the rim of the pelvis, its head takes an oblique position; for the longest diameters of this strait of the pelvis are obliquely

from either point opposite the socket of the hip joint, to the junction of the sacrum with the innomimatum of the other side. If the child's head presents with the face turned toward the sacrum, its forehead will be directed toward the sacral junction of, say, the mother's right side, and its crown toward the hip-socket of her left side. If the forehead look toward the mother's left saeral junction, then its erown will lie toward her right hip-soeket. The head may present with the erown backward, and the faee forward; and then the forehead may turn toward the right or left hip-socket of the mother, and the erown toward the opposite saeral junction. Either one of these four directions of the erown, is ealled the first position in a natural labor; and exists while the child is above the rim of the pelvis.



First position. Head nearly through the rim of the pelvis, and ready to rotate into the second position.

As the child is moved forward by the contractions of the womb, and its head begins to pass below the

brim of the pelvis, the longest diameter of the passage is no more oblique, but is directly from before backwards-from the symphysis of the pubes to the hollow of the sacrum. Of course the longest diameter of the child's head, which is from the forehead to the crown, will turn into the longest diameter of this portion of the pelvis. Accordingly the head is found to rotate a little to a new position. If the forehead has been lying toward either one of the hipsockets, it now turns a little forward and looks directly toward the junction of the pubes; but if the forehead has been lying toward either of the sacral junctions, it rotates so as to look directly toward the hollow of the sacrum. Before this position is fully attained, however, the head of the child (which at first lay close to its breast) is found to change this position; and if its face turned toward the sacrum, its chin leaves the breast and passes through a downward curve faster than does the crown of the head. The entire movement, therefore, is a somewhat spiral one; and before the head reaches its second position -with the forehead presenting directly toward the sacrum, or toward the pubes-it must descend quite low in the vagina.

When the second position has thus been reached, the contractions of the womb press the child steadily forward, but not in a straight line. Supposing the forehead (or face) to be turned into the hollow of the sacrum, the chin traverses the curve of this bone much more rapidly than the crown advances beyond the pubes. In consequence, the child's head advances in a somewhat rotary manner—the point resting

upon the pubes becoming a kind of pivot around which the sacral surface of the head turns. This movement is made as the head passes to the vulva;



Second Position. Face fully in the Sacrum.

and it is during this movement that the perineum is distended greatly. This is the third position.



Side View of Second Position. The Curved Lines to the left of and beyond the child's head, mark the advances of the head into the world.

When the child's head reaches the second position, its shoulders lie obliquely across the rim of the pelvis, or in the first position. As the head advances from the second to the third position, the shoulders advance from the first to the second; hence as the head passed beyond the third position and into the world, the spiral movement of the shoulders (as they pass one into the hollow of the sacrum and the other toward the symphysis of the pubes) gives a further turn to the head, and presents it to the hand of the midwife as if lying upon one side.

These several spiral and rotary movements of the child's head, are made necessary by the peculiar conformation of the pelvis. This passage has its axis, in the direction from above downward, in a curved line, as shown by the black curved line in Figure 3, and the child must follow this curve in its descent. The several directions are assumed by the fœtus spontaneously, and as a physical necessity guided by the conformation of the parts; and it would be folly for an accoucher to attempt to hasten or retard them by any measures. All an assistant can do, is so to understand these movements as not to feel any surprise at them as they take place; to know that nature never fails to perform them as she needs them; and to be ready to support the child's head upon the open hand, as the head passes into the world.

Breech Presentation.—The breech or buttocks sometimes appear first at the mouth of the womb, and the child is born in this position. The breech may be known, upon examination, by its soft and

rounded parts, with the fissure between them. As the child descends, its legs are bent up on the abdomen; but births in this presentation are generally as prompt as in head presentations. When the body is born into the world, the larger head may linger in the lower strait of the pelvis, from the fact that the womb will not at once contract to a bulk small enough to act upon the head and expel it. The child would die, if left in this position any length of time; and it would easily be destroyed, if an attempt were made to deliver it by pulling its body. proper course to pursue, is to give the woman, for half an hour or so before the body is born, some of the stronger stimulants to the uterus hereafter to be mentioned. These will generally excite the womb to a prompt continuance of its contractions; and then the labor will be completed with very little trouble to the woman. The umbilical cord should be pulled down into a loop, before the shoulders are born.

Other Presentations.—The face, shoulder, foot, and other parts of the body, may present themselves; and make a necessity for that assistance which none but a thoroughly educated physician can give.

#### RENDERING ASSISTANCE.

Making Examinations.—In a case of natural labor, it is a great mistake for a mother to suppose that an accoucher should make himself officious by attempting to hasten delivery. When nature is doing well, she should never be meddled with; and especially must no effort then be made either to hurry or force

the system. The resources of the frame are so great, and the provisions for the accomplishment of child-birth are so perfect, that every expectant mother should settle this axiom in her mind: Never to desire or allow an accoucher to do any thing toward expediting delivery, unless the case is found absolutely to demand it. Physicians themselves are usually judicious enough in this matter; but it is so very common for a lady to become impatient, and to urge her attendant to take some measures which will expedite parturition, that medical men are sometimes tempted to pursue a stimulating course merely to please the woman, when their own judgment would prefer patient waiting upon nature. The woman who thus urges or drives an accoucher against his own judgment, often suffers severely for the unnecessary steps he may thereby be led to take.

It is a mistake to suppose that assistance can be given by making frequent examinations. When once it has been ascertained that the presentation is natural, further examinations can do no good—except when a very protracted labor makes them no cessary, at considerable intervals, to ascertain progress; but their frequent repetition in an ordinary case, is immodest, useless, and even irritating to the parts. Some ladies suppose that, in these examinations, the attendant can help dilate the mouth of the womb with his fingers, and thus save her time and pain; and there have been physicians who would seek to make capital for themselves, by thus playing upon the credulity of their patients. But the physician can do no such thing with his hands; and the

attendant who would make such an attempt, would in that act show that he did not understand his calling, and prove himself unfit to be in the lying-in room.

An examination is required somewhat early in labor, or when the pains begin to bear down; for the nature of the part presenting can usually be learned when the month of the womb has dilated to the diameter of a couple of inches; and it is always a satisfaction, and many times an advantage, to learn this fact soon. If any eircumstance prevent the determination of the matter at the first examination, a second one should be made in half an hour or more; and a lady should never feel annoyed or alarmed, when her attendant does not satisfy himself as to the presenting part at the first examination. The mouth of the womb may not be sufficiently dilated, or too much water may lie before the child in the sae, or a variety of other conditions may interfere; and yet nothing whatever may be wrong. Some ladies have fallen into the opinion that no examination should be made till after the bag of waters has broken, and will not cheerfully allow it till then. This practice may do well enough, in many cases; but in the majority of instances, the child has then got very firmly inpacted in the rim of the pelvis, and should an examination then reveal a bad presentation, it will be more difficult to regulate it than if this had been known earlier.

The mode of making an examination may here be repeated. The first finger of either hand may be used, the nail being pared and the finger covered with either pure lard or sweet oil. The thumb and other fingers being closed up in the palm of the hand, the forefinger is slowly and gently to be inserted between two pains. Should a pain come on while the finger is within the vagina, let the finger be kept perfectly still-neither moved nor withdrawn; and if the point of the finger is at that moment lying against the mouth of the womb, or any of its contents, it should be allowed passively to slide downward as the pain presses the fœtus down. An accoucher always desires to satisfy himself of several facts, in making an examination, namely: The part of the child presenting, the moistness or dryness of the vagina, the softness or hardness of the os tineæ, and the propulsive force of the pains. On these accounts, a lady should not be impatient if he require a few minutes to decide these points; and, if he be gentle in making his explorations, a little time taken in making the first examination, may prevent the necessity of making others afterward.

Giving Medicines.—When all is going well, it is improper to give any medicines whatever. When the presentation is natural, the pains regular, the uterine contractions strong, and the pulse full, nature needs no help; and the lady should not urge her attendant to give her "something to hurry it through." Very many indulge in such a practice, but it is decidedly bad; it sometimes exhausts the womb by foreing it to greater exertions than the stage of labor requires; and is then liable to be followed by trifling pains at the time they should be

strong, by a sense of general fatigue, and by an exhausted irritability. Let the rule be an absolute one, that nothing shall be given to hurry the action of the system, so long as everything is doing well.

Yet medicines are many times needed. Thus, the earlier pains may be irregular and trifling, when a few doses of either the diffusive drops or the diaphoretic mixture will relieve the system; and then the pains of a true labor will become established, or false pains will cease. Or for the same purpose, a tea of equal parts of ginger, lady-slipper, and raspberry leaves, may be used-six or eight tablespoonsful, warm, every twenty or thirty minutes, while necessary. If the patient should at any time feel chilly, or cold, or faintish, and the pains languish, the diffusive drops may be given in a weak tea of cayenne-a dose every ten minutes; or a rather strong tea of the composition may be used; or a tea may be made of one part each blue-cohush and ladyslipper, one-half part bayberry, and one-tenth part capsicum, and several tablespoonsful given, warm, every fifteen or twenty minutes. These are among the most powerful preparations for these circumstances, and will soon rouse the most languid system; and they are also among the best agents that can be used in the last hours of labor for a patient in whom flooding is apprehended, or where a breech presentation renders the uterus liable to flag after the body is expelled. When the lady is irritable, restless and heated, she needs none of these stimulating preparations; but should then have a tea of the diaphoretic mixture, or of equal

parts camomile, ginger, lady-slipper and blue-cohush; or of equal parts scullcap, feverfew and witch-hazel. When the mouth of the womb is very rigid, and does not dilate properly, one-fourth part of lobelia herb may be added to either of the last two preparations, and given to the point of nausca; or a tea of lobelia alone may be given in doses of a teaspoonful every five minutes till the os tincæ relaxes. By thus varying the preparations to suit the different circumstances, and giving the portions at moderate intervals, the system will receive all the support usually necessary; and cases that might seem very unpromising, will soon be brought to a happy termination.

Ergot.—This article has long been a favorite among a very large class of physicians, who consider it the most efficacious and reliable article that can be given to stimulate the uterine contractions and facilitate labor. So long and extensively has it been used for this purpose, that many ladies have derived from medical men a conviction that its use is indispensable, and that the accoucher can scarcely attend to his business without it. Instead of this being the case, the careful accoucher will never use it; for it is a rank poison, and commonly increases the agony of labor, often causes grave mischief to the womb, and not unfrequently destroys the child. Upon this point, the authors in the allopathic profession furn ish the most ample testimony; from which a few brief selections sccm necessary.

The United States Dispensatory says of it, as an agent, that its use "produces a sense of weight and pain in the head, giddiness, dilatation of the pupils,

delirium, and even stupor. In its operation as a parturient, it produces a constant, unremitting contraction and rigidity, rather than that alternation of spasmodic effort and relaxation which is observable in the natural process of labor. Hence the medicine is apt to produce injury to the fœtus by the incessant pressure which it maintains, and the death of the child is thought not unfrequently to have resulted from its employment. It has been accused of producing puerperal convulsions, hour-glass contractions of the uterus, and hydrocephalus [dropsy on the brain] of the new-born infant."

Dr. Beatty, of England, has lately stated that, "when used in obstetric practice, it is liable by absorption into the system of the mother, to endanger the life of the child." Dr. Pereira says, in his Materia Medica, that "the contractions and pains caused by ergot are distinguished from those of natural labor by their continuance; scarcely any interval can be perceived between them, but a sensation is experienced of one continued forcing effort. If, from any mechanical impediment, the uterus can not get rid of its contents, the violence of its contractions may cause its rupture." Dr. Hosack says, "ergot has been called the power unto parturition; as regards the child, it may with equal truth be denominated the power unto death; for I believe its operation, when sufficient to expel the child, is to produce so violent a contraction of the womb as very much to impede the circulation between the mother and the child. Tenderness of the uterus, and even its actual inflammation, are said to have been induced by ergot. Weight and pain in the head, giddiness, delirium, dilatation of the pupil, and stupor, are the principal symptoms which indicate the action of ergot of rye on the brain."

Dr. Meigs, of Philadelphia, in his excellent work on Obstetrics, makes use of the following language: "I have had occasion many times to witness, during a long-continued practice of midwifery, the effects of the secale [ergot], whether administered by my own hands or those of others. It has frequently been the subject of conversation among my medical brethren here; and the general opinion of those gentlemen is distrustful of the ergot-not as to its want of power, but as to the dangerous nature of that power, whether as regards the woman or the child she is bearing. The objections against its use arise from the uncontrollable force which it awakens in the womb, leading to danger of lacerating the organ when the resistance to its expulsive efforts is too great, and very commonly to the death of the child. I have known laceration follow the exhibition of ergot; and have, on oceasions, stood by with fear and expected that horrible result. Let us think for a moment upon it. A labor is effected by the contractions of the muscular fibres of the womb, aided by that of the abdominal muscles. If all the power employed in a labor could be accumulated in one single pain, lasting as long as all the natural pains do, few women probably could escape with life from so protracted an agony. Now the influence of ergot excites in the fibres of the womb a contraction, or tonic spasm, which, when once begun, does not

ccase until the child is expelled, or until the spasm ccases from sheer exhaustion of power in the organ. This contraction is so great, in some cases, as to split or lacerate the womb on the projecting parts of the child. Such a pain may last twenty minutes, or even half an hour, without a moment's suspension. If the placenta is on the fundus uteri, and is to be jammed for thirty minutes against the child's breech without an instant of relaxation, who can doubt that its circulation is either wholly or nearly abolished, and that, when the child emerges at last from the mother's womb, it emerges quite dead? Multitudes of children are born dead from this very cause."

With such testimony (coming from gentlemen of the very first authority in their profession, with much experience in the use of ergot, and of extensive obstetrical practice), I think no woman can feel safe in using this drug under any circumstance. I look upon it as a sacred duty she owes herself, her infant, and her friends, to refuse to take such a bancful article; and also serupulously to avoid employing any physician who remains so ignorant of the improvements in his profession, as either to give or defend the giving of this pernicious agent.

Helping the Woman.—During the first stage of labor, while the pains are but dilating the mouth of the womb, the woman usually wishes to grasp the hand of her assistant, and press, twist, or wreneh it, but not to pull. The desire to pull comes only in the second stage of labor, when the pains begin to be distinctly expulsive; hence it is out of time now to urge a woman to pull on your hands or on a sheet.

Most women, during the first stage, want to have the back firmly pressed at the lower part, or across the upper end of the sacrum. So much do some women want this, that it seems searcely possible to press upon the back firmly enough to suit them; some desire this all through labor; while a few do not wish it at all. If the woman lie upon her side, this kind of assistance can be given readily by pressing steadily with the flat parts of the two fists while the pain is on. If she lie upon her back, a small pillow or folded eradle quilt may be placed under the back at its lower part.

When the pains begin to be expulsive, the woman, as before remarked, will begin to aid herself by bearing down; and she ean not refrain from doing this. She should be encouraged to take a pretty full breath as the pain is coming on; and to hold this breath pretty steadily, and aid herself by as much straining as comes naturally to her, while the pain lasts. At the same time, she should have an assistant in a position where she ean conveniently grasp her two hands or wrists, and pull upon them. Most women pull with great force, during this stage of labor; and the assistant whose hand she uses, should be of strong and steady musele. By having the woman's position rather low down in the bed, she ean press her feet against the foot-board of the bedstead while pulling with her hands-having the knees a little bent. Many women prefer to brace their knees against the hands or shoulders of an assistant; and this is a good plan, if it ean be managed. It is a common practice to tie the two ends of a rolled sheet to the two lower bed-posts, in such a manner that the woman can reach and pull upon the middle of the sheet; or the sheet, or a very long towel, may be tied around the middle of the cross-piece at the foot of the bed. This is a very good plan, and relieves the nurses from much straining in a tedious labor; but is seldom so grateful to the woman as to have the hands of a sympathizing friend to lay hold of.

During the progress of labor, the woman may be allowed and assisted to change her position from side to side; and to rise and use the vessel whenever she requires, except that just at the last pains, the discharges must be left to pass in the bed. And her pillows should be changed and shaken as they become hot and packed; and when she becomes flushed during the latter hours of labor, care should be taken to make her bed-covering as light as will be proper for the temperature of the room.

Expulsion of the Child.—When the child reaches the external parts, an examination must be made by passing the finger beyond its head, to find if the cord is around the neck; and if it is, it must be drawn downward gently, as soon as possible, and slipped over the head so as to free it from the neck. If this is not done in good season, the advance of the fœtus may so tighten the cord as to cut off the circulation, or prevent breathing, and thus cause the child's death. Sometimes the cord is twisted around the neck twice.

When, during the latter pains, the head presses violently against the perineum and distends it greatly, it is a good practice to place a soft napkin

over the palm of the hand, and then give a gentle support to the perineum by pressing the palm moderately against it—the thumb and finger extending on either side of the lower edge of the external parts. This plan supports the child's head upward, if the woman is lying on her back; or forward, if she is upon her side; and as this is the direction in which the head naturally advances when it reaches this position, the perineum is saved from the danger of laceration by thus giving an even and moderate support to it.

When the child's head is fully born into the world, it should be caught and sustained in the open palm of the naked hand; and its weight held up, and it allowed to rotate, as the shoulders advance. When the shoulders are born, they should be supported on the palm of the other hand, till the body is expelled; and then the child should be laid on the bed, upon its back or right side, but a very short distance from the vulva of the mother. The remainder of the liquid in the bag of waters, comes away in a heavy gush with the last pain that expels the child; and if this liquid should form a pool in the bed, eare must be taken not to place the child so that its head might roll into this. The mouth of the child should at this time, or before, be examined, to see if it is covered with any portion of the sac containing the waters, or clogged by any viseid mueus; and if so, this must be cleared away thoroughly by the finger, so that the child may now breathe. Children generally begin to breathe as soon as the head is expelled, and before the body is born; hence early attention

should be paid to the freedom of the mouth. So soon as the child is born and laid down, the accoucher should place one hand upon the mother's abdomen; and if the uterus is then found contracted into a hard mass, there need be no fear of unusual flooding; but if the womb is felt to remain large, soft, and uncontracted, the danger of flooding will be so imminent as to demand immediate attention. If during the last half hour or hour of labor, some of the above-named tea of blue-colush, lady-slipper, bayberry, etc., has been given, flooding will rarely occur; but should a flaccid state of the womb now warn the attendant of danger, a full draught of this tea should be given every three or five minutes till the womb is excited to contraction. At the same time, the accoucher should, with his hand upon the abdomen, make gentle grasping motions over the womb, and thereby favor its prompt contraction. When this necessary condition has been secured, the navel string may be cut and the child removed.

Tying the cord, or navel string, is a simple yet important operation—one that any woman can do, but which should be done properly. Its object is, to close the blood-vessels leading from the child to the mother, so that there may be no longer any communion between them and that there may be no loss of blood from the child. The child usually cries as soon as it is born; but the cord should never be tied till it does, or else till pulsation ceases in the navel-string. A piece of small bobbin is about the best material for tying the cord, and will be the better for being rounded by rolling between the

fingers. In place of bobbin, the midwife may use four strands of strong white silk or thread, twisted together with moderate firmness. This cord, which should be ready beforehand, should be tied an inch, or an inch and a half, from the child's body. It is not well to tie too closely to the child; for some babes have the bowel protruding a short distance into the cord, and it would be fatal to include the intestine in the ligature upon the navel-string. The knot should be drawn quite firmly; and a sufficient tightness may be known by feeling the inner coats of the blood-vessels give way while drawing upon the bobbin. When the cord has thus been secured firmly, it may be cut with a pair of sharp scissors about half an inch beyond the point where it is tied; and the child may then be lifted off the bed, wrapped in a sheet or cradle-blanket, and handed to the nurse or laid upon its right side, and covered snugly for future attention.

Removing the After-Birth.—After the child has been expelled, there remain in the uterus the placenta, membranes composing the sac that held the waters, and the umbilical cord. These together are called the after-birth, or the secundines. In a few instances, these are expelled almost simultaneously with the child; but in the great majority of cases, they remain till the return of some light labor pains cause their expulsion. These pains usually commence in from ten to twenty minutes after the child is born; they are moderately expulsive, and recur at intervals of several minutes; and a few of them are usually sufficient to detach the placenta and cast

it out. Should they be a little tardy, they may very properly be hastened by the use of either of the before-named stimulating teas. A little gentle traction may be made upon the cord, to see if the placenta is loose; but no heavy force should be used, lest the placenta being still fast, the cord break, or lest the uterus should be drawn down and inverted. It often happens that the placenta descends partly into the vagina, and may be taken away by passing the forefinger of one hand along the cord to the placenta and hooking under it, while traction is made upon the cord with the other hand. A little gentle manipulation will then succeed in removing this substance.

It sometimes happens that the placenta does not come away at once, nor even after some hours. It is a common belief among ladies, which belief has been obtained from their medical advisers, that serious consequences are liable to follow the retention of the placenta beyond one hour. Very grave apprehensions arise, lest it should grow fast, or has grown fast, to the womb—just as if it ever grew anywhere else, or as if it had not been "fast" to the womb for the last nine months! It is supposed that serious flooding, or fatal mortification, will ensue, if this structure be not speedily removed; and so the accoucher's hand is introduced into the womb, and the placenta torn from its surface and brought away. So accustomed have women become to this practice, that they look upon it as a necessity, applaud the skill of the accoucher who is thus daring in bringing away the after-birth, and can scarcely exercise any patience whatever with the attendant who will not be thus rash. In point of fact, however, this is a course full of error, and fraught with many dangers. When nature is ready to discharge the placenta (when this mass is no longer needed), she will take her own plan and time for loosening and expelling it; and the wonderful creative power which could so skillfully develope the germ, and give birth to the grown fœtus with such marvelous regularity, should certainly be supposed equal to the insignificant task of attending to the after-birth. If the inherent life-power of the frame can not be entrusted with this trifling duty, then why was it ever entrusted with the formation of the bones, brain, heart and other organs of the fœtus? and why did not accouchers step in to superintend the development of these wonderful structures, and take the moulding of them into their own hands?

The simple fact is, that this lack of trust in the power of the frame to complete its own undertakings, betrays an ignorance of the laws of the generative system. It is very far from being the truth, that a retained placenta, continuing its attachment to the womb an hour or a few hours after delivery, will produce serious consequences. There are no observations to prove any such assertion; but there are multitudes of facts to prove just the contrary. Many hundreds of instances are upon record, in which the placenta has been retained from one to two days, and then came away kindly and without the lady suffering the least inconvenience. In many instances, it has remained three or four days, and

then has been expelled without any trouble. In my own practice, I have had several cases of its retention for three days, and two cases for four days; and in no instance has there been any more trouble, or ill health, or bad symptoms, than are usual when the placenta is expelled the first hour. Were such cases few, they might be looked upon as accidental; but they occur frequently, and in not a single instance has any evil resulted from the retention. Of course the physician prefers an early discharge of the secundines, for this is both most common and most convenient; but where he does not find things the way he wishes, he should have more regard for human life than to venture any harsh interference with the laws and ways of nature.

A few moments consideration will show any rcflecting lady how unnatural is the procedure of removing the placenta by force. In the first place, it is a cruel torture of these sensitive parts, to introduce a hand and arm through them; and while no laceration is probable, excoriation and inflammation of them are very likely to follow. In the second place, if nature has not yet perfected her task so as to have the placenta in a condition to be detached by the ordinary contractions of the uterus, then the forcible detachment of it by the hand must break down the delicate tissues between them, and thereby lead to hemorrhage, or inflammation, or subsequent ulceration. Such is the fact in the case; and instead of the presence of the after-birth provoking flooding (which it failed to do through the nine months of gestation!) this alarming difficulty is very often caused by forcible attempts to remove the placenta—a fact testified in many thousands of cases in medical literature. And instead of retention causing inflammation, facts prove that it does not do so; but the violence used in its removal by the hand, commonly bruises the parts so much, that inflammation may be expected to follow, and will be averted only by extraordinary attentions. But much worse dangers than these may follow; for medical history reports a great many cases in which men of superior professional skill caused the complete and fatal inversion of the womb, in their attempts to take away the placenta by force, and cases in which others of equal skill ruptured the womb and caused immediate death while making the same attempts.

With such grave evils frequently resulting from interfering with a retained placenta, while no serious or alarming consequences arise from leaving nature to expel it in her own good time, no mother should ever consent that an accoucher should introduce his hand to her womb for any such unjustifiable purpose. She should wait patiently and calmly for the operations of nature; sustain her system by as little or as much warm composition tea as she needs; take some spiced bitters or other tonic, if found necessary; and give her mind no uneasiness when anxious friends talk about the dangers of such a course; for the "danger" is all imaginary, and not a solitary fact, nor a law in the physiology of generation, can be found to substantiate their fears.

Changing and Bandaging the Mother.—After the placenta has come away (or before, if it should be

rctained), the wet bed-clothing should be slipped downward carefully from under the woman, so that she may rest upon the dry sheet next to the bed, as previously described. After doing this, her own person may be suitably wiped with a cloth dampened with warm water; and then dried with another soft cloth. After this, her own under garments may be drawn down, and simply smoothed under her; the pillows changed for cool and aired ones; and the amount of bed-clothing regulated to suit her feelings. A napkin, or several thicknesses of old and soft dry muslin, should be placed next to the vulva, to receive the discharge, or lochia, that continues to flow from the genitals. A bandage should then be applied about her person, although, as the bandage is chiefly designed to brace the walls of the abdomen and sustain the womb from falling, some do not apply the bandage till the woman begins to get strong enough to sit up a little in the bed. The bandage is best made of two or three thicknesses of strong but soft muslin; long enough to lap its ends a few inclies after passing around the body, and from eight to ten inches broad, according to the size of the lady. This simple form of bandage is far more convenient and cleanly, than the gusseted and peculiar-shaped ones sometimes devised with much fanciful care. The bandage may be put on over or under the chemise, as may be most desirable. My own preference is to have it under the chemise, as I think it more manageable in that position. It should be passed under the woman so low down that when its ends are brought around, the lower edge of it should come quite below the haunch bones and across the top edge of the pubes. Some persons put it so high up, that it slips entirely above the haunch bones; but in this position it will push the womb downward, and endanger prolapsus. When brought into the proper position, as mentioned, it should be drawn rather tightly, the ends lapped over each other, and then pinned smoothly. It should never be made so tight as to pain the woman; the pins should be over one or the other groin, with their heads outwardly; and if the lady's abdomen be so flat that the bandage do not fairly press upon it at the lower part, a few broad thicknesses of soft muslin may be spread smoothly above the pubes before pinning the bandage. The lower edge of it should be made somewhat tighter than the upper. Some prefer to tie the bandage on with tapes, which were previously sewed upon it in proper positions. Of course, in arranging all these things, the woman should not make any exertions, and must be handled very tenderly.

## ATTENTIONS TO THE CHILD.

Breathlessness.—It may occur that the child does not breathe, when born. This may be owing to the presence of thick mucus in the mouth, or of a portion of the membranes over it—directions for the removal of which have been given already. Should this not be the cause of breathlessness, the cord should not be cut; but the child should be wrapped in warm flannels, and its nose tickled with a feather or other soft substance. If the placenta have been

detached and protruded into the vagina (the cord still pulsating feebly), success has often been obtained by taking it away and placing it in a basin of hot water, and then with the thumb and finger pressing or "stripping" the blood through the cord toward the child. The child should be kept wrapped in well-warmed flannels, with its face exposed; and the sprinkling upon the face and breast of small successive quantities of cold water, will greatly facilitate its revival. In addition to these measures, a tablespoonful of very weak ginger tea may be injected into the bowel with a small syringe; and while these steps are being taken, the child may be slowly turned from its right side nearly upon its face, back upon its right side, and thus repeatedly, as in a case of drowning. (See my Handbook of Medicine). Perseverance in these steps will usually be rewarded by success-even in some cases which seem quite hopeless. But much care should be taken to handle the child very tenderly; for sudden and jerking movements may greatly injure the child.

Washing and Dressing.—It is well to attend to washing and dressing the child as soon as convenient after delivery. Its whole body is covered more or less thickly with a whitish, unctuous matter, that is insoluble in water; and which renders the babe so slippery that it may fall out of the hands, unless taken hold of with much eare. This matter will eombine readily with sweet-oil, lard, or the beaten yolk of eggs; and then it may easily be washed off with soap and tepid water. My own preference is, to beat up the yolks of a couple of fresh eggs, and

rub this well over the entire body of the ehild with the naked hand; but good lard may be rubbed freely over its body, in the same manner. When the egg or lard has been incorporated thoroughly with the unetnous material on the body, the child may be washed. If the weather should be cool, the child should be taken near a fire, and an open fire is preferable; but as the babe's skin is very tender, care must be taken not to injure it by the heat. Tepid water, and nothing else, should be used in washing it, summer or winter; a cold bath is very objectionable, and too hot a bath is bad; a good quality of castile soap, especially the white kind, is better than hard soap or any of the faney toilet soaps; and a piece of stout flannel should always be used as a wash rag, as muslin or linen fabrics will not remove the material from the child's body. The ehild should have its skin cleansed very thoroughly; yet it must not be handled nor rubbed too roughly, and the soapy water must not be allowed to get into its eyes.

After the child has been washed and dried well, a piece of soft linen should be taken, about four inches wide and eight long, folded over crosswise, and a slit nearly an inch long, made in the centre of the two thicknesses. The inch or so of navel string attached to the child, is then to be drawn through this slit, and the side of the piece of linen folded over the cord. This is put on for the double purpose of receiving the discharges from the end of the cord, and to keep this part from adhering either to the child's body or its clothing. Sometimes a circular piece,

instead of a slit, is cut out of the centre of the doubled linen; and the linen itself is slightly scorched, and the edges of the opening smeared with lard, which are very good plans. This piece of linen is worn till the piece of navel-string comes away, which is usually from seven to ten days. It is held up against the child's belly, by a roller or "belly-band"-a piece of flannel about four inches wide, wrapped around the body and its over-lapping ends pinned behind or at the child's side. After this, the shirt, wrapper, and gown of the child, may be put on; but great care should be taken to cover every portion of the body and extremities properly, and to leave every article of clothing loose. It is peculiarly injurious for a new-born babe to have its bowels and lungs pressed in with tight girths; and when such a mode of dressing is adopted upon the plea that it is necessary to give the child a good shape, the practice becomes ridiculous as well as unhealthy. The power that developed the beautiful and perfect organism of the child, is the only one that can now mould its frame in the forms of symmetry and strength.

Purging and Nursing the Babe.—It is a practice among many nurses, so soon as the child is dressed, to lay it upon their knees and feed it several spoonsful of molasses and water, or catnip tea and molasses, or even a dose of sweet oil or castor oil. This is done under the impression that something of the kind is needed to make the child "all right;" and some good ladies take a peculiar pride in understanding to a nicety how much molasses to add to the

water, and how many teaspoonsful to give. The purpose is, to cause the child's bowels to move and cast from them a viscid, dark-green substance found in the intestines of all babes, and called the meconium. But this practice is a very decided mistake; for nature has, in the first milk of the young mother, provided a sufficient and superior means for moving the child's bowels. If the child be put to the breast in from three to eight hours after its birth, it will usually nurse; but if it should not nurse for twelve or more hours, and sleep soundly, no apprehensions need be felt. When it does nurse, a very little nourishment will supply all its wants; and however little it may seem to get, this should be no excuse for at once proceeding to prepare for it food lest it should starve. Mothers and nurses, in the excess of their tenderness, often commit injurious mistakes in this direction. The only wise course to pursue with a new-born child, is to refrain absolutely from all medication and all feeding; and to depend upon the small quantity of milk that the babe will find in the breast, as being ample both for its nourishment and the discharge of the meconium. In twenty-four hours, the babe will be found doing well, in both these respects; and should an exception to this rule occur, it will be time enough, at the end of twentyfour hours, to resort to artificial sustenance.

Regulating Deformities.—The great pressure to which the child's head is usually subjected during labor, causes more or less change of position in the bones, whose structure yields to accommodate itself to the passage of the pelvis. And it is not uncom-

mon for this same pressure to eause effusions to take place under the sealp, there giving rise to tumors of various shapes and sizes. Many nurses and mothers are at times quite anxious about these things; and it is a too common practice to attempt to regulate the temporary deformities by pressing here and there upon the skull, "to put it into shape." This practice is wholly unnecessary; and sometimes has done serious mischief to the sensitive brain of the babe. Nature should be left to regulate these things in her own way; and usually will do so with her accustomed perfection, in a week or two.

## DIFFICULT LABOR.

Tedious Labor—Instruments.—A perfectly natural labor may, as has been remarked already, be protracted for one or two days or more, and yet terminate without the least untoward aeeident. This delay may be oceasioned by the contractile power of the womb being feeble; or by the head of the child being unusually large; or by the pelvis being less than the natural diameters, or somewhat deformed. In all these classes of eases, the great requisite on the part of the lady, is patience. It is truly surprising how many obstacles nature will overcome, when sufficient time and a little assistance are allowed her; and eases that were protracted greatly, and seemed to present impossibilities to delivery, will finally terminate in a happy manner. Even in a narrow or slightly-deformed pelvis, nature is usually sufficient for the duties she has assumed; and it will require a remarkable narrowness, or an unusual deformity, to overbalance the powers of the system. These facts should be established so firmly in the mind of every prospective mother, as to give her an unconquerable faith in the capacity of her frame to complete her delivery; and then she will not be betrayed into any of those weaknesses which lead her to fear that something is wrong, or that powerful forcing medicines are needed, or that instruments must be resorted to, whenever labor chances to be somewhat protracted. Such baseless apprehensions often cause a nervous agitation that is very much out of place during confinement; or they lead the lady to urge the accoucher to the use of forcing agents when mild ones, or none at all, or even those which will allay the utcrine efforts, may be needed: or they cause the mother to exact from the attendant a resort to instruments, by which grave injury may be done to the lady herself and her child, but which can be of no possible benefit under any such circumstances.

Obstetrical history is so crowded with cases in which delivery was safely accomplished without instruments, after a delay which seemed to render the case hopeless, that it may, upon every data of fact and sound reasoning, be doubted whether the forceps are ever required in a case of head presentation. These instruments are used when the head presents; and generally when the passage of the child is considered possible, though it is supposed that the uterine power is insufficient to complete the task; or when a narrow pelvis leads to the supposition that the child can not pass. In the first cases, by this

distrust in the ability of nature, the accoucher is induced to attempt substituting his harsh iron for her soft and elastic tissues. Such an attempt is a piece of arrogance, inasmuch as it presumptuously sets up the devices of man as superior to the devices of Omnipotence. And when it is argued that the pelvis is too narrow, the accoucher stultifies himself by resorting to forceps; for any person should be able to see, that the blades of these instruments must occupy considerable room in the diameter of the passages, and thus greatly increase the obstacle to a delivery already pronounced difficult. No good need ever be expected from such presumption; and the following testimony in regard to the use of the forceps, by a few of many allopathic physicians of eminence who were familiar with the use of this implement, should satisfy any rational woman that they are fit for nothing but mischief.

Dr. Dewces, the eminent obstetrican of Philadelphia, speaks thus of his observations about the forceps: "I was once called upon to determine whether anything could be done for a newly-born child, which had been delivered by the forceps. The frontal bone was severely indented by the edge of the forceps; and one eye entirely destroyed by the extremity of the blade being fixed upon it. The child, fortunately, died a few hours after its birth. I have seen the whole length of the frontal bone cut through by one of the sharp edges of the forceps; and I have seen the parietal bone [bone at the side of the head], in the same wretched plight from the same wretched cause. I was once called to a poor woman, who had

had a considerable portion of the internal face of the right labium removed, by its having been included in the joint of the short forceps. The handles have been forced to lock at the expense of fracture of the skull: they have been employed where there was so much disparity between the diameter of the head of the child and the pelvis, that it could only be delivered after the forceps had nearly broken down its texture. The child dies by a species of murder; and the mother is subjected to inflammation, gangrene, sloughing, and even death."

The celebrated English author, Dr. Blundell, uses the following energetic language: "In all cases, the use of instruments contrived for the extraction of the fœtus, is to be looked upon as a great evil. I do not like to see an 'elegant' pair of forceps: let the instrument look like what it is—a formidable weapon. Force kills the child, force bruises the softer parts, and force occasions mortification, force bursts open the neck of the bladder, force crushes the nerves."

Dr. M. Chailly, a French author of much celebrity, uses the following language in showing the immense danger of using the forceps in cases of narrow pelvis, and the great *increase* of the difficulty occasioned by their introduction: "I have just demonstrated that the compression of the head scarcely ever determines its reduction, in a sense favorable to its disengagement; and experience shows that it is difficult for their compression to exceed four or five lines, without destroying the fœtus, and often endangering the life of the mother. In a word, the violent trac-

tions necessary to be made upon the head, in order to cause its descent into a pelvis of less than three inches, bruise and lacerate the soft parts; and the mother often falls a victim to this violence, while the child (already destroyed) can not be extracted. fine, because the expulsive efforts of the uterus may, in one, two, or three days, cause the delivery of the head, is this any justification for the accoucher to attempt the accomplishment of the same thing by instruments? Certainly not. In the first case, if children have been expelled alive, it is because the compression made by the womb is gentle, gradual, and continuous, and is not followed by the same unhappy consequences as when it is sudden and rapid—which is the case with the compression produced by the violent efforts of the accoucher, and which always destroys the infant. And what object can there be in applying the forceps, when it must sacrifice the child and seriously endanger the life of the mother? The accidents [to the mother] which may follow the use of the forceps, are, contusions of the soft parts, laceration of the perineum, contusions and lacerations of the neck of the uterus, perforations of the vagina-accidents of the most formidable character."

Professor Bedford, of New York, thus gives his views of the dangers of using this instrument: "Instances are recorded in which (especially where there was slight contraction) the bones of the pelvis have been fractured, or as eparation of the symphyses, together with laceration of the ligaments. . . . Rupture of the uterus or vagina, laceration

of the perineum, thrombus of the vulva, pelvic abscesses, prolapsus of the womb, etc., may be counted among the sequelæ of the use of the instrument." "It is a maxim of the assassin, that 'dead men tell no tales:' is it not equally true that those practitioners who destroy their patients by the rude and unjustifiable use of instruments, are very much disposed to allow their deeds of blood to accompany their victims to the grave? . . I trust I may be pardoned for the plain and emphatic manner in which I write on this important question; but I feel that I have a sacred duty to discharge. But a short time since, I visited a poor creature who had been attended in her confinement by a medical man, who found it necessary to call to his aid two of his professional friends. The woman had been in labor only six hours, when it was deemed necessary to resort to the forceps. She was delivered of a dead child, with the right parietal bone crushed and the corresponding eye forced out of the socket! The unhappy mother had only been delivered four hours when I saw her. She was at that time vomiting, her face pale and haggard, with a pulse extremely rapid. On an examination, I detected a rupture of the neck of the utcrus, and the poor creature was soon released from her sufferings-having expired just fourteen hours from the time her labor commenced! . . . I will not weary you with the narration of kindred examples of cruelty, which I have witnessed; for the heart sickens, and the mind grows restive, under the contemplation of such deeds of iniquity."

There is such a peculiar fondness, amounting almost to a mania, for the use of forceps, in America, that I have felt it a duty to be thus lengthy in quotations upon this point. With such testimony, from the pens of gentlemen so qualified to express an opinion, no woman who regards her own safety or the safety of her child, should ever consent to allow the use of forceps. There may be circumstances, remarkably rare, in which other instruments become necessary; but there seems no manner of sensible excuse left for the employment of this instrument; and if ladics would positively refuse to submit to its use, and refuse to patronize any accoucher who would seek to save his own time or hide his own ignorance by resorting to it, this instrument of torture would soon be discarded from obstetrical practice.

Obliquity of Uterus.—In some instances, the fundus of the womb is thrown so abruptly forward, and its mouth is so directly backward against the upper part of the sacrum, that the pains only press the feetus against the sacrum, and make no advances in its expulsion. This is annoying, but need cause the mother no anxiety as to its seriousness. It is generally relieved by having the lady lie upon her back; drawing a broad towel firmly around the abdomen in such a way as to lift up the uterine enlargement; and with one finger drawing the mouth of the womb downward, and perhaps, holding it in that position till the pains have forced the child's head into the rim of the pelvis.

Bad Presentations.—Other parts than the head of

the child may present at the mouth of the womb, as the breech, face, back, hand, feet, shoulder, etc. The breech causes very little more trouble, ordinarily, than presentations of the head; and the mode of managing it has already been alluded to. The feet really cause no more difficulty than the breech, and are to be managed in the same way -taking care to draw down a loop of a few inches of the cord as soon as it can be reached. other presentations sometimes require the highest skill of the accomplished physician, and are such as no prudent midwife will seek to manage by herself; hence their discussion does not belong to the province of this work. But when a mother learns that any unusual presentation exists, it should not cause her any extreme agitation, nor be allowed to overcome her feelings and thereby weaken the utering power. A skillful accoucher usually conducts the worst presentations to a successful issue; and though some cases may be beyoud his skill, and compel the sacrifice of the child, such eases are rare to the extreme degree, and are not likely to compromise the safety of the mother. They call for the exercise of the highest degree of patience; and both the mother and the friends should act calmly, restrain themselves from any undue excitement, and allow their professional attendant ample time-leaving it to his own judgment. The woman and her friends may feel strongly inclined to have counsel called in, and may urge this upon the gentleman in attendance; but it is usually the most prudent and just course

to allow him to suggest counsel when he thinks he would like to have it, and by no means vehemently to demand counsel when he eonsiders it unnecessary. A truly sensible accoucher will be frank in telling the friends when he would like to call in professional advice; and such a desire on his part, should be a proof that he deserves the highest confidence, and not be considered as an evidence of deficient knowledge or of irremediable danger. And when eounsel is ealled, it should always be such as is agreeable to, and selected by, the physician in attendance. It is one of the first rights due to a medical man, to allow him to choose his own counsel; for he alone is eapable of judging whose professional advice is most likely to benefit him in any particular ease. It is a great injustice for a family to insist upon eounsel, in any ease, when the attending physician disclaims any need of assistance; but if counsel is decided on, it is a still greater injustice in any manner to attempt to impose upon him the assistance of a person to whom he objects. Many a mother, during labor in unusual presentations, is subjected to much needless suffering, by herself or her friends failing to observe these two simple laws in professional Better discharge the physician at once.

Puerperal Convulsions.—During labor, women are sometimes seized with convulsions. These are usually very severe, render the woman completely uneonscious, generally recur at every pain, and may continue after the delivery of the child. Sometimes they cause the death of the mother, but this occurs much more rarely than is generally supposed.

Such convulsions are always a cause of anxiety; but they are by no means necessarily fatal to mother or child. They do not stop the uterine contractions, but mostly seem to increase the energy and frequency of these contractions. They may be provoked by unusual sensitiveness of the uterus, by chronic disturbances of the nervous power, and more particularly by collections of degenerated material in the smaller tubes of the liver.

These cases are for the attendance of the skilled accoucher. The first necessity on the part of friends, is to be calm and self-possessed. While these spasms present a very alarming appearance, they are not always so dangerous as they seem. The remarks already made upon calling in counsel for bad presentations, apply with still more force in these cases of convulsions.

It has long been the opinion of many physicians, that puerperal convulsions could not possibly be relieved except by bleeding; and this idea has passed from the doctors to the people, many of whom are disposed to pronounce an accoucher incompetent, unless he quickly draw blood in this malady. The practice is a relict of past days, being invented when medical science was in a very crude state. Intelligent medical men now understand that bleeding will not stop puerperal or any other convulsions; that loss of blood is one of the surest causes of convulsions; and that to use the lancet in these cases, is to intensify the spasms and almost surely to destroy the patient. For an accoucher not to know these facts, or to act in opposition to them, is to confess igno-

rance of the present state of his own calling; and such a confession of ignorance should at once deprive him of the confidence of any parturient lady. Professor Bedford, of the New York University, uses the following energetic language in reference to such an absurd and fatal practice: "Let us, for a moment, pause and examine this point; this examination may at some future time serve you, and protect your patients against the fatal consequences of stereotyped practice. There is your patient-in gestation, and attacked with convulsions. The instant you approach her, true to the undying instincts of routinism, you call for a bandage and basin; the bandage is arranged, the basin all in readiness, and the lancet plunged into the vein. The blood flows, the patient faints; and soon after reaction comes on, there ensues another convulsion more marked than the preceding. You have not taken away blood enough, whispers that fatal delusion-routinism. The ligature is again applied, the orifice opened, and slowly runs the current. Fainting follows; the spark of life is again rekindled by a feeble reaction; another convulsion; and speedily death closes the scene, thus preventing further depletion. 'O,' says the practitioner, 'if I had seen the case at the commencement, I should undoubtedly have saved that life.' To the ignorant and uninitiated, such language may prove a mantle for the concealment of reckless and unjustifiable practice; but it will fail to appease the severe exactions of science. So far from depletion being indicated in the case just cited, it may peradventure be that the resort to the lancet is the eause of death. There is no fact more essential to be borne constantly in mind, than the direct connection which exists between excessive losses of blood (no matter how produced), and convulsions."

It is by many supposed that such convulsions demand the immediate use of the forceps, for the positive extraction of the child. This notion is no better founded than the practice of bleeding, and is equally destructive to both mother and child. The presence of the child is not the cause of the convulsions, as is proven by the oecasional recurrence of the spasms after the fœtus has been delivered, and by their arising in women suffering uterine irritability but not pregnant at all. How foolish, then, to proceed violently to destroy the child, and to mangle the mother with forceps, when such delivery will do no good, and may not in any degree remove the cause of the spasms. Very many labors, in which eonyulsions occur, terminate favorably to both mother and child, without any resort to forceps; and there are no reliable facts to show that most cases would not result equally well, if bleeding, forceps, and stupefying chloroform, were entirely disearded.

The proper course to pursue in these convulsions, is to give the patient a tea as follows: Blue-cohush, lobelia seeds, and ginger, equal parts; cayenne, half a part; a heaped tablespoonful of the mixture to a pint of hot water; two or more tablespoonsful every ten minutes. It may be that the patient can not swallow any, or but very small quantities; and then from an even to a heaped teaspoonful or more of the mixed powders may be given as an injection in three

ounces of starch water, and repeated every hour or half hour. The patient will usually retain these injections, without any trouble; but should they be voided, the cayenne may be omitted. If the feet are at all cool, they should be washed every two hours with a very strong preparation of cayenne. This course, duly persevered in, will generally secure the most happy results; but it may require from a few hours to two days, to put an end to the spasms.

## FLOODING-HEMORRHAGE.

Every woman, at eonfinement, is subject to the loss of more or less blood upon the expulsion of the ehild. When this flow becomes unusually free, and eauses weakness or faintness, it should be cheeked promptly. Sometimes this flooding becomes very exeessive, and may oeeasion death in a short time; and this hemorrhage is doubly dangerous from the faet that it may take place a number of hours after delivery, and that a elot of blood may so stop the mouth of the womb as to prevent the escape of any fluid to draw attention to the flooding. On these accounts, it is necessary that the accoucher should, as already mentioned, place his hand upon the abdomen of the woman as soon as the child is born, so as to make sure that the womb is contracting properly; and if it is not thus contracting, to lose no time in using the means necessary to secure this action. And the patient should also be watched closely, but not in an annoying manner, for several hours after the placenta has been discharged: for a hemorrhage that may be prevented from escaping

beyond the vagina, may infallibly be detected by the fast, soft and fluttering pulse, cold checks and nose, pale lips, [and sighing respiration. When these several symptoms are noticed, rely upon it that there is internal flooding, and lose no precious time in waiting for this flow to show itself outwardly. A hesitating delay, though but short, may then sacrifice life.

Management.—As uterine hemorrhage depends upon a relaxed state of the womb, and a strong pressure of blood upon it, the flooding can be checked only by hastening firm uterine contractions, and distributing the blood to the surface. Both these influences must be exerted at the same time; and the dangers of the case demand that they be made promptly and powerfully. Ergot will excite uterine contractions, and therefore has been much commended for flooding; but, as has already been seen, the contractions under its use are unnatural, and it induces more crowding of blood upon the womb, hence it is a very broken reed to depend upon in such cases. Cold water, whether applied to the abdomen or vagina, causes uterine congestion; and never did and never can stop a bad case of flooding, no matter how firmly popular ignorance on these topics may believe to the contrary. Sugar of lead is an astringent, and may do a little temporary good; but it can not distribute the blood to the surface, and the use of it would soon prove fatal. It is a practice with some to plug the vagina with a roll or ball of cotton; but this can not possibly exert the least influence upon the blecding surface of the

womb, and merely prevents the visible discharge of the flow—which all the time is going on within the uterus. All such measures as the above, should be discarded at once and forever; for it is a great error to believe that any of them can be of the least permanent value in these cases, and the precious hours lost in applying them, will very often prove fatal to the woman.

In the section upon Abortion, all the milder and stronger measures effectual in uterine hemorrhage, have been described fully. The means directed in those eases, may confidently be relied on in the worst eases of the present elass. The two most positive of these are, cayenne (or red-pepper), and bayberry bark. In the absence of these, such stimulants as bark of priekly-ash, black-pepper, redflowering smart-weed, or ginger, may be used; and such astringents as hemlock bark, sumae bark, raspberry leaves, beth-root, or witch-hazel. More stimulants than astringents should be given, the infusion should be made quite strong, it should always be used warm, and the doses should vary from one to six tablespoonsful every ten, five or three minutes. If the patient can swallow but a little at a time, or if the stomach reject the medicine by vomiting, or if the prostration is alarmingly rapid, the same remedies, in a little more diluted state, may be given by injection to the bowel. The better mode is, to give injections of the powdered articles in a thin starch water; or combine with a little powder of slippery elm, and then mix the whole with a suitable quantity of tepid water; but if the patient is sinking rapidly,

the tea may be given directly, without losing time in preparing starch water for the first injection. This measure possesses astonishing power. At the same time, whether injections are used or not, the abdomen, fcct, and legs, should be bathed thoroughly with the stimulating liniment, or else the strongest possible tincture or infusion of red-pepper; and then a layer of flannel, wrung out of quite hot water, should be laid upon the abdomen, and renewed every ten minutes or less; and the limbs should be wrapped in a heated blanket, and have hot bricks put at the feet and each hip. These external measures arc of the greatest advantage, and must not on any account be omitted; and if these several means are used vigorously, and without any loss of time in trifling timidity, the fullest confidence may be placed in their power to arrest any hemorrhage of the kind, where the patient is not in articulo mortis before treatment is commenced.

Flooding may often, or indeed generally, be averted, by using a tea of such articles as ginger, bayberry, and beth-root, for the last hour or two of labor; or if the case is one in which hemorrhage is considered liable, a tea of composition should be used in the latter part of labor, or one of prickly-ash and bayberry with a small quantity of capsicum.

# CHAPTER X.

# MANAGEMENT AFTER DELIVERY.

### HYGIENIC REGULATIONS.

THE exhaustion a woman feels after child-birth, the species of shock suffered by her nervous system, and the sensitive and relaxed state of her tissues, all conspire to make her peculiarly sensible of every condition and influence around her; hence a good recovery depends very largely upon the management she receives after the child is born. So often is this fact forgotten, that many persons imagine any kind of a nurse will do; and that the most ignorant old lady then knows more than the most skillful physician. The mother who consults her own health, will employ a nurse or midwife noted for her good sense, cautiousness, and freedom from the old-time prejudices of ignorance.

A woman just delivered, should be moved as little as possible; should receive no toddy, cordial, or any form of alcoholic stimulus, on any consideration; and should take no stimulus of any kind, unless faintness or flooding call for the diffusive drops, or other means directed for such conditions. The room should be moderately darkened, and kept very quiet; no visiting or talking should be allowed, except what is really necessary; and when talking is necessary, let it never, in any sick room, be done in whispers. The patient herself should talk none; and it is a

great disadvantage, and often is the occasion of very serious complications, for her to receive the visits of her friends for a week or two after confinement. The woman needs rest and quiet, and can not be deprived of them with safety. In most cases, if the room is darkened and quieted soon, the mother will procure a nap within a few hours; and this will be a great relief to her frame. A judicious nurse will allow but a couple of assistants in the room at any time; will insist on having it entirely to herself, immediately after the mother is cared for; will allow no boisterousness in any adjoining room; and will continue so to regulate the room as to keep it mildly and evenly warmed, dry, ventilated thoroughly, not too dark, and every thing about it quiet, and espeeially all arrangements for the night completed at a very early hour each evening.

Most women desire a little nourishment soon after delivery. This is particularly the ease if labor have been somewhat tedious. Not more than two or three hours should be allowed to pass, without offering her something; and generally a little will be taken in an hour. The first food should be only a little tea and light toast, or a few tablespoonsful of gruel, arrowroot, tapioca, or other simple article. After that, the patient should be fed very regularly. For the first three days, the articles mentioned should constitute most of the diet, with the addition of a small roasted potato at dinner, or a roasted apple at supper, after the second day. It is an error to give these ladies too much drink of any kind, under the impression that it must be used to "make milk;"

for drenching the stomach with fluids, will soon impair digestion. Cocoa and chocolate are too oily as drinks; and are objectionable at this period, and can be used at all by but very few ladies at any period of suckling. But a woman lately confined, is not to be kept upon gruels; for beef tea or light animal broth is necessary to most ladies within three days, and those who are thin and nervous often require a little such food by the end of the second day-not doing well till they receive it. Meat itself should not be used till many days after delivery, though some robust women do well upon the use of a little of it in five or six days. A judicious nurse will not allow a course of either half-starvation or untimely surfeiting; but will feed the patient with great regularity, allow only the plainest and least fatty foods, deny preserves, eakes, and similar luxuries, and gradually increase the solidity of the diet as the patient's strength improves. Should the patient be of slender frame, and complain of languor, a little broth or beef tea or thin gruel, may be allowed between the regular meals.

The clothing of a lying-in woman should be light in summer, and sufficient in winter to secure equable warmth. A not uncommon fault of nurses, is covering the lady too heavily, at the same time keeping the room very warm, lest she should "take cold." It is very necessary to avoid cold; but too much warmth relaxes, and swelters the woman, makes her feverish and restless, and may cause serious mischief. The lady's bowels should be carefully attended to, lest they become costive; but it is far better to move

them by a laxative injection, as of tepid water and molasses, than by relying upon physic. Physic should be avoided as much as possible, though at times a little leptandrin may be required. The bladder should also be attended to, and the urine not allowed to accumulate, or to remain undischarged longer than six hours at a time. If it should not pass voluntarily, it should be drawn off by a catheter, and no attempts be made to cause its passage by the use of diurctics; for such agents merely increase the activity of the kidneys, and thus force more urine into the bladder, whereas the danger consists in the fact that the bladder is already distended with urine which can not find its way out. When the bowels or bladder is moved, it will be far better for the lady to lie upon her back and use a bed-pan, than to rise up and use the ordinary bed-vessel; for the erect position causes soreness and aching, and may favor weakness and prolapsus of the womb.

After-pains arise from the continued contractions of the womb as it gradually returns to its normal size. They come on at intervals, varying from a few minutes to half an hour or more; gradually return less frequently, and usually subside in about two days. A woman with her first child, suffers less with these pains than those who have borne children; and some women are so harassed by them, as to be kept in misery and deprived of adequate sleep for two or three days. If they are moderate, no attention need be paid to them beyond assuring the lady that they are natural and urging her to bear them patiently. If they become so severe as to

fatigue her, and especially if they prevent good sleep, medicines may be used to moderate the irritability of the uterus. Among the best for this purpose, is a tea of equal parts beth-root, ginger, and lady-slipper; an even teaspoonful of each in a teacupful of hot water, and one or two tablespoonsful given every hour, or two hours. An assafætida pill may also be given every four hours.

Lochia.—For a number of days after confinement, there is a sanious flow from the uterus, known as the lochia. The quantity is not large; but its sudden or very early disappearance is a cause of grave apprehension, from the fact that, except at the diminution of it during milk fever, it gives rise to that most alarming of all female maladies-child-bed fever. While the flow continues, it should be reeeived upon a napkin gently warmed and placed at the vulva; and this napkin should be changed several times a day, and the vulva and adjacent parts lightly washed once or twice a day with tepid water and a little castile soap. Too much washing is annoying and tiresome to the woman; and the habit of syringing the vagina when all is doing well, as advocated by some, is more troublesome than useful, and often irritates the genitals and leads to colds, inflammations, etc. If the lochia are very scanty, and the woman seems restless and prostrated, the case is likely to lead to child-bed fever, and should at once be managed as directed for this difficulty. Should the flow remain three weeks or more, it is likely to prove exhaustive and lead to a prostrating leucorrhea; and it should then be arrested gradually by a use of cold composition tea several times a day, by stimulating liniment on the abdomen, and by small doses of either the woman's friend or the female restorative. The bowels should at the same time be kept gently open; and the feet and general surface warm by a stimulating wash applied once a day, if necessary. Sometimes the lochial flow is diminished a few hours when the milk-fever sets in, and this need occasion no alarm.

Colic.—The woman is sometimes troubled with sharp colic pains. The abdomen feels tender on light pressure, the pain is relieved by steady and firm pressure, and there may be a little bloating. There is no fever, headache, nor other symptoms of child-bed fever. This pain is owing to distension by wind. It may be relieved, usually, by an enema of half a pint of catnip and white-root infusion; and by the use of a teaspoonful of magnesia in mint water every four hours.

Milk Fever.—The full flow of milk to the mother's breasts, takes place about the second or third day after delivery. This flow is usually accompanied by a diminution of the lochia, quickening of the pulse, headache, and a little heat upon the surface. These febrile symptoms are usually light, and pass off in a few hours. The breasts fill pretty quickly, and have a peculiar pricking and tingling sensation. This febrile excitement needs no medication, and it is important only to distinguish it from child-bed fever. In the latter difficulty, there are lancinating pains through the abdomen, great increase of this pain on

pressure, pinched countenance, and flaccid breasts; all which are lacking in milk fever.

Getting Up.—Every mother is anxious to have a good "getting up;" and that a little boast of smartness may be made, some are in the habit of trying to leave their bed in a very few days after delivery. Some women will be off the bed in three days, and occasionally one will leave it the second day. Such women, if they escape serious difficulties as a consequence of this course, must be considered as being more nearly animals than the majority of ladies would like to be; and such examples would be very dangerous ones to follow. The fatigue suffered by the nervous system, and the lax and exhausted condition of all the uterine organs, demand ample time for their restoration; and the lady who taxes her strength by premature efforts to keep upon her feet or in a chair, will surely suffer from prolapsus, weak back, enfeebling leucorrhea, and great nervous derangement, as a penalty for her temerity. The great majority of women do best by keeping their bed till the tenth day. From the fourth to the sixth day, if they feel able, they may rise to an easy chair for five or ten minutes, while their bed is being made; and if they do not weary at this effort, they may by the seventh or eighth day be allowed to sit in the chair twice each day, for ten minutes at a time. But even this can be borne only by the robust; and it is more than probable that they would do better to wait a little longer. But if the woman keep her bed for nine days, it is a most absurd idea then to get her up and keep her up. The bed can

not be left at once, but the woman must gradually accustom herself to being off of it. She should rise several times each day, and sit up ten or fifteen minutes each time, and gradually lengthen this time as her strength improves. No woman, on first leaving her bed, should be allowed to sit up two or three hours at a time; and especially should she not be allowed to have many visitors or much talking at these first efforts, for her mind will become much exeited and her nervous system be materially overdone, by company or exhibarating conversation then. Delieate and slender women may not be able to leave their bed for more than half an hour at a time, at the end of the third week; and it is immeasurably better to allow every woman an unusual amount of time to rally, than to urge her forward in the least. Many months of suckling and nursing are still before her; these will make a demand upon her strength; and therefore it is necessary that she begin this period of her duties with her frame fully recuperated from the fatigue of its recent struggle.

#### SORE NIPPLES.

The frequent moistening of the nipple in suckling, makes it tender; and the sucking of the child causes its excoriation. The part becomes very tender, and some women suffer torture each time the child is put to the breast. It seldom begins till the second week after delivery; and may, unless well attended to, last many weeks. It may usually be prevented by the mother taking extreme care to dry the nipples thoroughly, with a soft napkin after each

nursing of the child; and then to apply to them a little simple eerate, made by melting together two parts of white wax and one part spermaceti. Or a very pure quality of beeswax may be heated with enough sweet oil to form a pliant mass, and this used instead of the cerate. If there is any dripping of milk after or between the times of nursing, it should be wiped away often and carefully. Some ladies make a strong infusion of geranium, raspberry leaves, beech bark, green tea, or other mild astringent, and with it wash the nipple each time after the child nurses; and some claim to derive great benefit by using such a wash upon the pipple several times a day, for a week or more before confinement.

If the nipples become excoriated, they should be washed with the astringent tea after nursing, then dried carefully, and the cerate, or beeswax and sweet oil, applied. The oil of black-walnuts is very soothing to some ladies. Some add a very little camphor to the preparation with wax; but this article often dries up the milk and paralyses the milk ducts. An ointment made by macerating the inner bark of elder in lard, straining and stiffening with a suitable quantity of beeswax, is a good preparation; and beth-root, staff-vine, or bugle-weed, may be used for the same purpose. The woman must be very persevering in these attentions; if her digestion and bowels are deranged, they must be regulated according to their needs; and the breast must be kept pretty well emptied of milk-drawing it by the breast pump, if the child does not suck enough.

Pains on Nursing .- So great is the sympathy be-

tween the breasts and the uterus, that many women, for several weeks after confinement, suffer sharp pains through the womb every time the child nurses. This may be relieved by using the following infusion: blue-cohush, lady-slipper, and ginger, in equal parts; a heaped teaspoonful of the mixture to a teacupful of water; two tablespoonsful of the tea every hour. In addition, a nervine injection may be thrown into the bowel two or three times a day; and stimulating liniment may be applied to the lower abdomen.

#### CAKED BREASTS.

Any circumstance which checks the perspiration, may favor congestion in one or both breasts, during suckling; and if the milk is abundant, and the young babe do not nurse it out freely, the milk hardens and the breast is then said to be "caked." It feels hard, tender, and painful; unless soon relieved, the caking may extend so as to occupy nearly or quite all the breast; the pain becomes very severe, and the patient at the same time suffers headache, feverishness, and costiveness. If the flow of milk is not restored within a very few days, suppuration will take place and an abscess will be formed.

A caked or "bealed" breast is so extremely painful, and always causes such a disturbance of the general health, that every nursing woman should take the greatest care to avoid the possibility of such an accident. This may be done by avoiding exposures, protecting the breasts in cool weather with an extra covering of flannel, keeping the milk well drawn, and taking measures promptly to break up

any cold that may be contracted. When pains and hardness in the breast call attention to the commeneement of caking, the milk must be drawn as freely as possible; and if the babe can not do it, a breast pump, another person, or some young animal, must be employed at once to do it. The milk should thus be drawn at least every three hours. If the hardness does not yield readily, it may be softened by bathing the parts, before each attempt to draw the milk, with a mixture of sweet oil and tincture of lobelia. Tineture of lobelia may be used alone; ointment of elder bark may be used for the same purpose, and so may a fomentation of lobelia herb or mullein with a little slippery elm. It is a common practice to apply spirits or camplior in these eases; but this article does not soften the hardened milk, and will paralize the milk glands and leave the breast withered for life. This is the effect of camplior, and also of lime-water, when used to dry the milk at weaning time.

While thus attending to the breast, diffusive drops, diaphoretic mixture, or a warm tea of white-root and ginger, or other good diaphoretics, must be used to secure gentle sweating. Profuse perspiration is not necessary; but so great is the influence of a feeble circulation upon the breast, that it is a necessity to secure a full flow of blood toward the surface as soon as possible. By pursuing this course steadily for a few days, at the same time eating moderately and keeping the bowels gently moved by the liver pills, the hardened milk may generally be removed and further difficulty averted.

If these means do not relieve the eaking, the pain becomes of a throbbing character; and this throbbing always denotes the commencement of suppuration or "gathering." It is now no longer of any use to attempt to "scatter" the hardening; and the efforts should all be given to getting an early discharge of the pus, preventing the abscess from spreading, and sustaining the patient's general health. The breast should be poulticed with four parts of lobelia and one part ginger, mixed in powdered elm or flaxseed; while feverishness lasts, the woman should keep her bed and take a teaspoonful of diffusive drops in warm pennyroyal or catnip tea once an hour, or use pretty freely of the diaphoretic mixture; and keep the bowels gently open with leptandrin or the liver pills. Advantage may also be gained by taking a nervine injection, or an injection of an even teaspoonful of lobelia herb, once in two or three hours. The pain is severe, and no treatment can do more than partially mitigate it. When the surface begins to soften at some point about the middle of the hardening, the abscess may be opened at that place by a narrow lancet-which is far preferable to waiting three or four more days in agony for the abscess to open of itself. After the abseess is opened, the same poultice may be continued; though more ginger should be added if the surface look dull-red, and ginger and dogwood bark in elm should be used if the parts at any time become darkcolored and seem disinclined to heal. A narrow strip of oiled linen should be inserted in the opening, lest it close up and make need for a second

lancing; and this piece of linen should be removed twice a day, and the sides of the absecss pressed very gently to cause a discharge of the pus.

After the opening of such an absecss, the feverishness abates and the woman is usually quite feeble
and nervous. Her strength will need to be sustained
by such a tonic as yellow-poplar, golden-seal, and
cherry, a half pint of infusion made by using a heaped
teaspoonful of each, and a tablespoonful of this given
three or four times a day. A cold tea of composition should at the same time be used at intervals
through the day. The spiced bitters are a good
tonic for lingering cases; and sometimes the frame
becomes so depressed that, the case not improving
after many days, one or two stimulating emetics
will be required before any advance toward a cure
can be made. The liver pills should be used to keep
the bowels regular.

#### CHILD-BED FEVER.

Child-bed fever is also called puerperal fever. It generally appears in from four to seven days after confinement, but may not arise till two weeks or more. It consists of inflammation of the womb and the peritoneum, or thin membrane investing the bowels. This inflammation sets in with most startling rapidity; congestion follows speedily; and then so strong is the tendency to mortification, that the lady may die in two days or less from the attack, unless the progress of the disease is arrested by decisive measures. It is generally provoked by exposures to cold, and may be caused by violence during labor; and

the urine, perspiration, and lochial flow, are suddenly checked before or at its onset.

Symptoms.—In the midst of perfect ease and cheering recovery, the mother will have a slight chilliness pass suddenly over her, and with it a sense of great depression. A flush of warmth follows, and soon another and a sharper chill. Tenderness is felt at the lower abdomen, and the pulse begins to rise. There may be alternations of chilliness and feverishness, of more or less severity, for several hours; and then fever symptoms set in very strengly, the face flushing, and the pulse beating 120 or more to the minute. The tenderness of the abdomen soon increases to a very severe pain; in a little time, the abdomen will become so tender that the woman will lie upon her back with her knees raised, as the only position that can be endured; the weight of the bed-clothing becomes burdensome; the least pressure on the abdomen increases the suffering greatly; and in the course of a few hours, the slight motion of the intestines in breathing will increase the pain, and thereby cause the woman to breathe short and hurriedly. She becomes agonized, and may scream at every breath or at the prospect of any person's touching her. The countenance becomes pinched, and marked by a painfully anxious expression. Nausea follows, presently there will be belchings of wind, and in a little time there will be vomiting of yellowish, greenish, or even black material. Unless the difficulty is overcome before it passes this stage, the tongue will become dry and brownish, the abdomen will swell, and the lips get livid. The pulse will soon begin to recede from the wrist, the feet and hands get very cold, clammy moisture break out, the mind wander, and the patient will soon die. In many eases, there is a scanty and very fœtid discharge from the vagina.

Costiveness and wind in the bowels may give a woman pain and swelling, with a little tenderness; but firm pressure rather relieves the pain, the woman may toss about instead of lying fixed upon her back, and there are no febrile symptoms—all which distinguish it from child-bed fever. In milk fever, there is no tenderness of the abdomen nor position on the back; and the pulse is full and soft, instead of being small and hard, as in child-bed fever.

Treatment.—In a malady so serious, a physician should be called at the earliest moment; and at the first signs of it, the nurse should not lose a minute's time in sending word to the physician who has been in attendance. Until he shall arrive, or in the absence of a physician, if one of the right kind can not be had, a course like the following should be pursued:

Make a tea of two parts white root, and one part each ginger and lobelia; two tablespoonsful to a pint of boiling water; give eight tablespoonsful every fifteen minutes. Give half a pint of tepid water, containing a very little soap, as an injection to the bowels; and if this does not procure a stool, repeat it in an hour, or less. After moving the bowels, give an enema of an even teaspoonful of lobelia in a little starch or elm water, have it retained, and repeat once an hour till full relief has been ob-

tained. Rub the abdomen freely with the stimulating liniment; put over it a single layer of hot flannel, and renew this as often as it gets cool: Put hot irons, bricks, or jugs of water, at the feet and hips; and if the feet are cold, rub them with the stimulating liniment. When these measures have fully nauscated the patient, and a perspiration appears, double the dose of the tea, and give it every ten minutes till free vomiting takes place. After vomiting, continue the tea in small doses, maintaining mild nausea; and if bad symptoms return after a few hours, increase the quantity of tea till there is again vomiting. Continue the lobelia injections steadily, till the giving way of the bad symptoms; and then they may be repeated every second or third hour, as required. After vomiting the patient twice, it is usually best to use the diffusive drops in warm camomile tea, giving a pretty large dose every half hour or hour.

Sufficient vigor in the above course, will commonly relieve these cases—especially if begun very promptly, and the emetic repeated as often as the cold extremities and worst symptoms make it necessary. Emetics given in this way, are of wonderful power in removing foul accumulations from the stomach, and breaking up all internal congestions; and though the patient may think she is too feeble or too sore thus to vomit, she will find her strength improved at once, and the act of vomiting will give her the greatest relief from her suffering. If the case do not yield to the first attempts, persist in this course; increase the amount of lobelia in the injec-

tion, and add half a part of bayberry and one-tenth part of eavenne to the tea. This must especially be done if the pulse become small; or a tea of one part each composition and lobelia herb may then be used, made strong, and given in doses of six or eight tablespoonsful every ten or fifteen minutes. liniment upon the abdomen may be renewed as often as every hour or two; and a single layer of flannel, wrung out of hot water and renewed as it gets cool, may be laid on the bowels. The bed-elothing should be made as light as is consistent with good warmth; and if the quantity that is necessary should prove burdensome to the patient, they should be supported off of the abdomen by pieces of hoops placed suitably. Should there be an offensive discharge from the vagina, this passage should be syringed twice a day, or oftener, with tepid suds, and then with tepid water containing six tablespoonsful of tineture of myrrh to the pint. The diffusive drops in camomile tea will again be suitable, after the patient has been relieved from the worst symptoms; a dose of leptandrin should then be given night and morning, and an injection of weak soap-water every morning till the bowels become regular. Convalescence should be aided by a cold infusion of two parts camomile and one part ginger, given in suitable doses every hour or second hour. The room should be kept quiet, and of an even temperature, throughout; the milk must not be allowed to accumulate in the breasts, but must be drawn by the breast pump and not fed to the babe; and if the urine is not passed, it must be drawn by the catheter about every six hours.

### MILK LEG.

This usually appears in from six to ten days after confinement, but may not arise for several weeks. One leg alone commonly suffers; but both legs, and even the arms, may be attacked.

Symptoms.—Chilliness and feverishness usher in the attack. Then follows a sharp pain in the groin, labium and thigh; or the pain may begin in the leg, and run up to the groin and abdomen. This pain is continuous, follows the course of the veins, and is much increased by pressure or a firm extension of the limb. Feverishness, thirst, and headache, continue. In two or three days, the limb begins to swell; the skin looks milky-white, and is very hot, shining, and tender; the leg becomes stiff, and feels weary and very heavy; and in a few days its size may become enormous. In most cases, the swelling begins to subside in a week or ten days, and the limb gradually regains its normal state; yet at times it remains moderately swollen for many years, and may then continue white, numb, and nearly useless. In some severc cases, abscess of the veins may arise speedily, and prove very serious. It is usually caused by cold, violence in labor, or disease of the womb. Scrofulous and cancerous persons are most liable to it.

Treatment.—First unload the bowels by a large injection of boneset and ginger; and keep them opened twice a day by the liver pills. Use the diaphoretic mixture in large doses every half hour,

while there is feverishness; and give an even teaspoonful of lobelia by injection every two hours, and have it retained. A fair perspiration should be maintained by these measures. The limb may be enveloped in a large poultice of lobelia and mullein, mixed with a little elm, and applied and kept warm. This course will usually put an end to the acute symptoms in a few days; and then the limb should be bathed freely three times a day with the rheumatic liniment, and kept wrapped in flannel; while the patient drinks a little warm composition tea every hour, and uses some yellow-poplar and boneset three times a day, as a tonie. The limb should be bathed well once a day with tepid water and soapmoving it but little. If there are pain and restlessness, an injection of lobelia may be continued every six or four hours.

Chronic cases of this malady are by no means incurable; but if a skillful physician is consulted, and his treatment carried out with vigor, the limb can usually be restored to its proper size and strength. The aim of this volume admits only the mention of the best course, which consists of repeated stimulating emeties, the daily use of alteratives and tonics, general sponge or vapor-baths occasionally, medicated vapor-baths to the limb daily, with a free use of the above liniment, a recumbent position, and warmth by flannel bandaging. It will require many weeks to restore such a case.

# CHAPTER XI.

# MANAGEMENT OF CHILDREN.

#### HYGIENE OF CHILDHOOD.

Feeding .- For the first three days after being born, an infant requires extremely small quantities of food; and the little obtained from the mother is sufficient. (See page 338.) No other food is needed, unless the mother has really no milk for three or four days. The child may then be given cow's milk, prepared in the following manner: Let the milk stand four or five hours: then remove the upper layer half an inch or more deep without disturbing the lower portion. When milk stands, the cheesy substances settle, while the buttery substances rise; and in about four hours, the upper portion comes nearly to the character of woman's milk. The last gill or two of a cow's milk, at each milking, is equally suitable. Dilute this milk with rather more than two and a half times its own bulk of tepid water, and add not more than the bulk of two peas of white sugar to a gill of the mixture. A few teaspoonsful every two or three hours, are sufficient for the child till the mother is able to nurse it.

A child needs to be nursed very regularly. For the first three months, no child should take the breast oftener than every hour and a half, and two hours is generally sufficient. During the night, every four hours will do. A mother should be very strict in this matter, and gradually lengthen the time after the third month. To nurse a child every time it worries or eries, is unwise, and a great source of disease. Too many children are over-fed, or are permitted to gorge themselves, and die from the effects. Protracted disease, or insufficiency of milk, may eompel a mother to cease nursing. When a ehild must be brought up "by hand," the milk should be prepared as above directed; the proportion of water should be diminished gradually, so as to be equal with the milk by the fifth month, and two-thirds by the twelfth month; and the proportion of sugar should also be diminished till by the twelfth month the merest trifle is used. It is common to use entirely too much sugar throughout-thus eausing bowel disease. The child's nursing-bottle should be kept serupulously elean, and its sponge changed often. The least sourness about it, will be very hurtful. Gruels, porridge, rolled eracker, etc., should never be allowed to a child, till it has developed several teeth, and then only onee a day in small quantities. A child should be weaned when a year or fifteen months old, unless it is undeveloped; though it may be nursed somewhat longer, if sodoing will avoid weaning it in mid-summer. A great error commonly made at weaning, is to feed the ehild too much solid food; whereas its principal food should be milk till its eighteenth month. When a ehild vomits its food, it is an evidence that it is eating too much.

Besides having to eease nursing a child from in-

sufficient milk, a mother may need to wean her babe very early, in consequence of the exhaustion suckling may cause her frame. Severe constitutional disease, such as consumption, dropsy, active scrofula, etc., do not admit of the mother nursing her child at all.

Clothing.—A child's clothes should always be loose, soft, and warm. Tight-bandaging and heavy swaddling are injurious, and often deform the child and produce diseasc. The whole body should be equally protected, leaving the head alone without covering. It is very wrong to expose a babc's arms and breasts. In cold weather, such a practice is extremely pernicious, and often fatal. A child needs full warmth; and nothing is more cruel than to clothe any part of its body insufficiently, either during infancy or childhood. The idea that halfclothing is good for a child, and will "toughen" it, is opposed to all scientific principles and to common sense; and this practice causes much disease and death among infants and children. Too much covering on a babe, especially when it is asleep, is also hurtful; and that anxiety which causes many kind mothers to heap bed-clothing upon their babes till they sweat, is an injudicious extreme of carefulness.

Bathing.—A child should be bathed all over every morning, at least for several months. Tepid water should always be used, with a little white castile soap. The room should be of good temperature; the bath should be brisk, but with gentle handling; and the body should be dried with a

very soft towel, using only moderate friction. It is especially necessary to cleanse well the joints and folds of the body. No bath should be given less than an hour after nursing. A child a year old, may be bathed in eool water in a warm room; and in eold water during summer. To prevent chafing, the folds at the thighs, neek, etc., may be dusted with a little finely-powdered elm, or starch, after bathing and drying.

Sleeping.—An infant sleeps a great deal, if in good health; and if it become restless, the eause is oftenest found in that greatest of all infantile mismanagements - over-feeding. A child's bed should always be moderately firm, not made of feathers; and the bed-elothing should be well aired every day. Its sleeping apartment should be large, light, capable of thorough ventilation, and not erowded with oeeupants. In eold weather, it should never be overheated, nor be kept so elose that the air may become vitiated; and the apartment should be kept gently warmed through the night for a young babe. A child should always sleep with its face uncovered, from the hour of birth; and as it gets older, the head should be kept uneovered. At night, and especially during eool weather, no place is so natural for the child as its mother's bed; and I ean not approve the plan of eausing the babe to sleep by itself. While the mother has a loehial discharge, the babe should not be nestled up to her, or lie with its face toward her; though it may be placed near her, wrapped in a little blanket of its own. If a woman is prostrate with

disease, or is known to be addicted to movements during sleep, the child should not lie with her. As a child grows up, this same rule should be followed; and it is highly injurious to children to sleep with old or infirm, or diseased people. Many children are weakened and stunted by thus sleeping, and some sink into premature decay. It is always best for a child to sleep on one side of the bed and not in the middle. During all the growing years of ehildhood, young folks should have a great abundance of sleep; ten hours or more will be none too much, from the second to the tenth year, besides a nap in day-time up to the third or fourth year. The day nap should not be taken immediately after dinner, and if taken too late or too long in the afternoon, it may prevent early evening sleep. Early rising should be practiced, and the time necessary for full sleep be gained by the earlier retiring; yet a young child had better be left to awake of itself in the morning; and a child over eight years of age should neither be awakened or taken from bed too abruptly, nor allowed to take a morning nap after it has once been awakened.

Exercise.—A babe enjoys exercise by sitting up and being carried about in the arms, or taken out when the weather will allow. It should receive some such exercise daily, with a due amount of air and sunshine. But trotting babies on the knees, and tossing them into the air, and shaking them by the small elothes with their heads downward, are improper; and should not be indulged in at all, and particularly after a meal. Violent rocking in a

eradle or chair, with the head rolling from side to side, is injurious; but a little gentle rocking is agreeable. As the child grows up, it should be allowed to take exercise according to its own inclinations; and young ehildren require to be in the open air a great deal. Too many children are hampered and confined by restriction to the house or at school, during the very years of life when they should be at liberty to develope musele and good digestion by abundance of out-door sports. A judicious parent will never consent thus to erush out the joyous vitality of her child; but will give it freedom to play almost continually, allow some romping and boisterousness without attempting harsh and exacting restraints, and will not force it to hard and fatiguing study. It is a great advantage to a child to learn to do light labor every day; but no heavy or fatiguing exertions should ever be allowed; and some ehildren have to be restrained in their plays, lest they overdo themselves. Some parents go to the extreme of requiring hard work from a growing ehild, and of exacting almost a man or woman's labor from a youth of fifteen or less. Such a course will surely exhaust the body, stunt the growth, and lead to premature decay. Even in infancy, a child may be overdone by too much motion; and it is a common error to walk ehildren too much. Thus, while abundance of exercise is allowed, judgment must be used in restraining at the proper time.

### DISORDERS OF INFANCY.

The Navel.—The piece of navel-string attached to the child, decays and comes away in from five to seven days. It usually emits a little bad smell, which need occasion no alarm. Should there be any bleeding at the point of connection with the child, a powder of gum myrrh, oak bark, or hemlock bark, or bayberry, may be sprinkled on the sore. After the string comes away, the child's navel may be dressed with simple cerate or an ointment of elder. Should the end of the cord bleed after tying, it should be tied again a little below the first ligature.

Costiveness.—Should the babe become costive, it is usually owing to costiveness in the mother; for so close are the relations between the mother and child, that costiveness, biliousness, eruptions on the surface, diarrhea, etc., may be nursed by the babe in its mother's milk. If she take physic, alterants, etc., the child will feel them. It is by no means advisable, therefore, to give any such medicines to a nursing child, till the mother's system has first been regulated; and if the child then suffer costiveness, or jaundice, or any cruption, it may receive medicine. No harsh physic is allowable; but a teaspoonful or more of sweet oil, or some spiced sirup of rhubarb, will be found suitable. It is often the case, that the costiveness depends upon the condition of the lower bowel; and then, a small injection of molasses and water, or of weak ginger tea in starch water, should be given morning and evening. This is incalculably better than a habitual resort to physic.

Restlessness.—The most common of all causes of

restlessness and fretfulness, is, too much feeding. Instead of putting the child to the breast to appeare its fretting, the mother should learn rather to keep it from the breast and firmly to lessen the amount of its nursing or food. In a short time, the stomach and bowels will recover their natural state, and probably little or no medicine need be given. A warm tea of catnip, will usually relieve the child; and so will a tea of peony or lovage roots. If the child's body is cold, a little ginger may be added. A few teaspoonsful once an hour, are sufficient; and it is a mistake to crowd a young babe's stomach with any tea at short intervals, thus diluting its juices and weakening digestion. If the stomach is sour, one-fourth of a teaspoonful of the neutralizing cordial may be given every second hour. It is a common practice with mothers to give a restless or sleepless child, some paregorie, Hoffman's anodyne, Godfrey's cordial, Winslow's soothing sirup, or other narcotic article of this kind. While such agents will check pain and put the babe asleep, they do so by stupefying the nerves, and not by removing the cause of the pain; and when the child awakes, it is likely to be as restless and more feeble than it was before. The transient relief thus obtained, is at the expense of the child's vitality; for all narcotic articles are liable to induce costiveness, and congestion of the bowels, brain, and lungs. A child seldom receives enough to kill it outright; but the repetition of quite small doses, will soon undermine its vigor and leave it pale and flaceid; and then any trifling attack of disease finds the child an easy victim. It is reliably computed that, in the United States alone, one hundred thousand young children die every year from the use of opium preparations—prescribed either by themselves or their physicians. I beseech mothers, by all the holy affection they bear to their offspring, to allow no circumstance, consideration, or advice of others, to lead them to the use of any opiate or narcotic for their children.

Griping and Colic—A child brought up by hand, or one over-nursed or allowed food beyond its power of digestion, is liable to wind in the bowels, with griping and paroxysms of suffering. The quantity of food should be much diminished; and if the babe is being fed some, none but the simplest articles should be allowed. In a case of severe suffering, two teaspoonsful of sweet oil may be given to unload the bowels, and an injection of strong catnip tea given at the same time. If the griping recur habitually, half a teaspoonful or more of neutralizing cordial may be given three times a day, and an injection of tepid water or catnip tea each morning.

Diarrhea.—This commonly follows griping, and proceeds from the same cause. It first requires a limited diet; and if the child is old enough to eat, a very little thin arrow-root, or flour boiled in milk, should be used. A teaspoonful of neutralizing cordial every six or four hours, some warm tea of ginger once an hour, a warm bath night and morning, a weak wash of smart-weed or cayenne to the abdomen twice a day, and a broad bandage of flannel around the body, will usually regulate this difficulty in a short time. A little looseness of the bowels

from teething, requires no medicine, but in all other cases, diarrhea should receive prompt attention.

Thrush, Sprue or Nursing Sore Mouth.—This is a state of ulceration, appearing in the mouth as small white spots, gradually spreading. The mouth is tender and hot; and the child is irritable, nurses poorly, and may be extremely drowsy. The thrush may exist in considerable patches on the tongue and cheeks; a similar condition is present in the stomach, from which the malady has its origin; and it may, if at all neglected, pass slowly through the bowel-inducing severe diarrhea, pain, and emaciation, and often slow death. Simple cases may be relieved by moderating the food, and washing the mouth (without rubbing off the crusts) several times a day with a soft swab dipped in the following tea: raspberry leaves or gold-thread, golden-seal, and ginger, in equal parts. In worse cases, use a wash of bayberry, dogwood and golden-seal; and let the child swallow a couple of teaspoonsful of the same once in two hours. In very bad cases, a small portion of tincture of myrrh should be added to the last wash; and the child should use an emetic every second day, till improved, by taking a tea of equal parts composition and lobelia-two or more tablespoonsful every ten minutes. This is a powerful means; and will often, if used in season and with energy, save children otherwise beyond hope. No child is too young or feeble to take such an emetic, when needed, as abundant experience has proven. Between the emetics, the child may take a couple of teaspoonsful of composition and golden-seal tea once an hour, and

a teaspoonful or more of neutralizing cordial every four hours. Sometimes it may be impossible to save the child without giving the mother a stimulating emetic every second or third day, with spiced bitters three times a day, and liver pills to remove biliousness.

Retention of Urine.—When a young child does not pass its water seasonably, great pain and screaming soon take place. The difficulty is owing to a stoppage in the passage from the bladder, and not in a failure of the kidneys; hence diuretics should not be given at all. Immerse the pelvis ten minutes or more in rather warm water; lay above the pubes a flannel dipped in warm water, and renew often; give half a teaspoonful of lobelia herb in a little water as an injection, and repeat every hour; make a tea of two parts white-root and one lobelia, and give two or more teaspoonsful every five or ten minutes. The urine will be relieved by the time full nausea takes place.

Inflamed Eyes.—This many times affliets babes by getting soapy water in the eyes when washing them. The edges of the eyelids look a little red, and stick together a little; some whitish matter soon appears on the inside of the lower lid; and the child shuts its eyes against light, which eauses it pain. The eyes look weak, and weep a little; and perhaps in a single day from the onset, the lids may swell, a free discharge of pus set in, and the babe become feverish and restless, with coated tongue and torpid bowels. If neglected, it may not be many days till the eyesight will be injured beyond reparation;

hence not an hour should be lost in commencing vigorous treatment. The edges of the lids should be washed carefully, but very thoroughly, with tepid water—using a piece of soft linen to remove every trace of matter. Then, lying the child on its back, lift up one lid at a time and cleanse out the matter thoroughly with a soft cloth or a camel's-hair brush wet in tepid water. Then wash under the lids with a little of the following infusion: golden-seal, yellow-pond lily, and lobelia, equal parts; half an even teaspoonful of the mixture to two ounces or more of hot water; use blood-warm, three or four times a day. Move the bowels with some sweet oil or neutralizing cordial, and limit the nursing.

Teething .- A babe usually begins to develope its first teeth between the fifth and sixth months: some begin as early as the fourth month, while others in good health do not cut a tooth till the ninth or tenth month. They generally appear in pairs, the first on the lower jaw and its fellow on the upper jaw soon after, till twenty teeth are cut. This set is called the stomach teeth, and their development occupies from eightcen to twenty months. The appearance of a tooth is heralded by a free discharge of saliva for many days, with a disposition of the child to bite on the finger, a crust of bread, or other solid substance. During the period of teething, the babe is liable to fretfulness, looseness of the bowels, and griping; but these are not at all likely to prove of any detriment, if the mother will cautiously diminish the amount of the child's food, not feed it articles too solid for its weak digestion, and not allow it to eat irregularly or too often. By being thus attentive to its diet, it is not probable that any medicine whatever will be required; for children in teething die generally from the derangements of over-feeding, and rarely from the disturbance caused by the teeth themselves. Should the looseness of the bowels become too free, it may be managed as elsewhere directed for the diarrhea of children. Sometimes the gums are dense, and the teeth can not get through readily. The gums swell considerably, look purple, become very painful, provoke free diarrhea, and may lead to convulsions. The gums should be cut early, so as to allow the tooth to come through. This can be done readily with any small, sharp blade; the incision should be made in a line with the edge of the tooth below; it causes really no suffering to the child, and gives relief at once to the bowels and brain.

## PREVENTION OF SCROFULA AND CONSUMPTION.

In the sections upon Puberty, Menstruation, Chlorosis, and others in this book, remarks have been made upon the habits and influences which are likely to develope consumption. The great importance of every topic relating to this disease, demands that this subject should be fully understood; and as the growing years of life is the period when the seeds of consumption and scrofula are generally sown, the mother has a high and holy duty to perform in so regulating the life of her children as to prevent the implanting of such serious maladies. So well has this subject been presented by Dr. T.

Bull, of England, that I feel my readers will derive the greatest benefit by quoting his article, as follows:

"Scrofula is beset with dangerous misconceptions. Its cure engages a great deal of attention; but its prevention would be far more certain than its cure can be, if the popular mind were more fully informed of its nature.

"The term scrofula is popularly applied only to enlargements of the glands of the neck. Now these enlargements are the result of a peculiar condition of the entire system; which condition may manifest itself in any part of the body. If it show itself in the lungs, it constitutes consumption; if in the joints, white-swelling; if in the bowels, mesenteric disease, and so on. It may be defined as a disease, of debility, which besets the functions intended to maintain the frame in good repair; the result being the presence in the blood of a material which becomes deposited in various parts, and which there obstructs the functions, destroys the structure, and leads to processes which may result in the removal of these deposits, but which more frequently destroys life.

"Thus, if this morbid matter is deposited in the glands of the neck, they become hard and enlarged, and may remain so for years. But if these glands have inflammation excited while in this condition, what was hard becomes soft, the skin gets thin and breaks; matter is discharged, and with it perhaps a hard mass of scrofulous deposit. After this, the inflammatory symptoms will subside, and the parts return to their former state—in a measure uninjured.

"Let the same deposit be formed in the lungs, and follow the same course, and the consequences will be far different. The portion of the lung occupied by the disease, will inevitably be destroyed. Although

the scrofulous (or tuberculous) matter may be expectorated, the damage to the lung can not be repaired. If one portion of the organ pass through the process safely, the chances are that the same deposit has taken place in other portions; and these will have to go through the same course, till death ensues from this destruction of the organs of breath-

"Scrofula is either inherited, or produced after birth. In the vast majority of individuals, it has been transmitted from parents to offspring. To escape the misery and sorrow of raising a family of scrofulous children, marriage must be avoided at too early an age; between persons having too great a disparity of years, too closely allied by blood, and especially between those of scrofulous families, or with a taint of latent scrofula in their own frames. It will be difficult to get people to recognize and conform to this policy; but when the public are fully informed of the misery and suffering which want of foresight will entail upon their own offspring, this liability to scrofula will be taken into the account of prudence, as much as the liability to insanity already is.

"The healthy offspring of healthy parents, may have scrofula developed in them by the influence of unfavorable circumstances. Among these, I would especially impress upon the mind the following, as being the most important: insufficient nutriment; habitual exposure to heat and cold; the privation of pure air, and sufficient light; want of natural exer-

cise; mental disquietude.

"When scrofula already exists in a family, the pre-disposition to it will be in varying degrees of force. In one child its features will be scarcely manifest; in another, they will be strongly marked. If it be possessed by either parent, the children must be considered as liable to it; and where both parents are strumous [scrofulous], the children in all probability will be doubly so. The predisposition, as noticed in consumption, will now and then seem to pass over one generation altogether, and visit the next with terrible havoe. Various causes tend to give rise to these different results. Much will depend upon the state of both parents' health at the time of the conception of the child; much upon the management of the mother's own health during pregnancy; and, above all, on the management of the child after birth, and the circumstances by which it is surrounded.

"If we can not eradicate the tendency, we do possess the means of so invigorating and amending the constitution, as to justify the expectation of a freedom from the peculiar disorders in which it is prone to manifest itself. And when it is remembered that this sad condition of health is, for the most part, the parent's gift, their obligation to do all in their power to counteract its baneful effects, must appear in a strong light. The system of management suitable for these cases, demands a most rigid attention to all its details, conjoined with a careful protection of the child from those sources of injury which might fall harmless upon other constitutions.

"If the infant inherit the strumous disposition from the father only, the mother being entirely free, and of sound health, it may be nursed by her. But, if the mother is strumous, wet-nurse suckling must be resorted to. Artificial feeding, or bringing up "by hand," is quite out of the question; for it alone will be sufficient to develope the disease, as such a child would thus be imperfeetly nourished. The wet-nurse must be of sound and vigorous health; and the child should be nursed till it is twelve or fifteen months old, and has passed through the dangers incidental to the period of teething. For the last six months of nursing, it is most advisable to

have a fresh wet-nurse. When, as the child gets teeth, artificial food is given, it must be of the lightest quality, and form but a small proportion of the nutriment. Solid food must be commenced with great caution, used in small quantities, and given but once every second day. Its effects must be watched; and if not found to flush the cheeks, and derange the healthy secretion of the bowels, the new diet is agreeing with the child, and may be continued sparingly. Let the food be nourishing, but never stimulating, nor of a kind hard to digest.

"The clothing should be suited to the season of the year, and amply sufficient to protect the child from every sensation of chilliness. At the same time it should be light in quality, so as not to overheat and oppress. The neck, arms, and legs, must be covered. Their exposure is a frequent source of acute disease in children, and will invariably be found, in a scrofulous child, to cause the glandular enlargements so much dreaded. Flannel should always be worn next the skin, but always taken off

at night in summer.

"Pure air is indispensable. Indeed, one author considers that vitiated air alone is sufficient to cause scrofula. There can be no doubt that impure air favors the development of scrofula in those who already have the predisposition. The full and even ventilation of apartments must be strictly attended to, according to those principles of ventilation which alone can secure a pure atmosphere. And plenty of light is also needed by such a child-not merely sufficient light for ordinary purposes, but an abundance of it; and much of it should be direct and unobstructed sunshine. If the child is born late in the year, he had better not be taken out of doors till the following spring; and if his apartments are well ventilated, and well lighted, this confinement during the cold and damp months, will not be injurious. After that, when the weather will permit, the more

the child is in the open air, the better.

"Such constitutions are peculiarly susceptible to eold and damp. Everything, therefore, should be done to diminish the liability to impressions of cold. The baths of the early months of infancy should always be of a grateful warmth; cold water should be advanced to gradually, and used sparingly; good friction should follow every bath; and a salt bath, or a slight shower bath, may be indulged in, as the child advances. A few months spent in a damp loeality, by a child predisposed to scrofula, is quite sufficient to develope it in one or other of its forms. If possible, then, avoid for a serofulous child a dwelling built near water (particularly if stagnant), or near sluggish ereeks, low grounds, or marshes. Also avoid one closely surrounded by large trees, which shut out the sun, interfere with the free cireulation of air, and eause quite too much humidity in the atmosphere. A low situation, especially if surrounded by trees, may be eapable of inducing tuberculous disease in an infant; whereas, a rising ground, a hundred yards distant, may afford a healthy site for his residence.

"Great caution will be necessary in such a child's education. These children are generally precocious in intellect, which too often leads to an injudicious, and (as it too frequently proves), a fatal mental discipline. The long confinement in a school-room (perhaps badly ventilated), day after day, and the mental exhaution which hard study induces, are fraught with peculiar danger to strumous children. Sir J. Clark has remarked on this point: 'At no period of youth should education be pushed beyond its proper limits, or the mind be worked above its powers. The welfare of the pupil demands the observance of this rule on the part of the master as well as the parents, more especially when the child be-

longs to that class of strumous children whose intellects are preternaturally acute. Unfortunately, however, these are generally the pupils selected by the master to do credit to his establishment; every means are taken to encourage the premature manifestation of mind, and to stimulate the child to renewed exertions. Thus health, and even life, is often sacrificed at a period of brilliant promise, when the hopes of friends are buoyed up by the fallacious expectation of a harvest which a more rational system of education might have realized."

## CHAPTER XII.

## MEDICAL PREPARATIONS.

## EMETICS.

EMETICS exert two positive influences in curing disease: 1st. To free the stomach, liver, and gall ducts of those foul materials which so frequently accumulate in them—depressing all vital energy and interfering with the action of medicines. 2nd. To distribute the blood strongly to the surface, and thus break up inward congestions and inflammations. Their value is beyond compute, in all such circumstances; they are harmless, in all these cases; and no woman need ever fear that she is too feeble to use them, or that they will cause difficulty or pain, in any case where the system needs them.

In feverish cases, ginger, lobelia herb, and white

root, may be mixed in equal parts; two tablespoonsful added to a pint of boiling water; and from two to four tablespoonsful of the warm tea given every twenty minutes. Continue this till full nausea and some sweating result; then give half a teacupful every ten or fifteen minutes, till free vomiting ensue. If relief is not then obtained, the small doses may be used again, and the vomiting repeated, as before. This is ealled the *relaxing* emetie.

In chronic eases, with considerable depression, a stimulating emetie is required. Make a strong tea of the composition powder; keep it warm, and give half or one-third of a teaeupful every half hour, for three hours. Then steep two heaping tablespoonsful of lobelia herb, and one-eighth of a teaspoonful of eayenne, in three gills of water; strain after fifteen minutes, sweeten well, and take one half at a time, ten minutes apart. Then use half a eupful of the composition tea every ten minutes. By continuing this tea freely, a person will usually vomit three times in this form of emetie. If there is any cramping in the stomach, more tea will relieve it. If there have been free vomiting, and a nauseous and filthy feeling remain at the stomach, add half a teaspoonful of eooking soda to a pint of the eomposition tea, and renew its use till vomiting again takes place. If the stomach is suspected of being sour, some soda should thus be added to the tea immediately after taking the lobelia. A ease needing this kind of an emetie, will derive little benefit from it unless it is made very thorough.

An ordinary emetie, neither particularly relaxing

nor stimulating, may be given by using equal parts of composition and white root for a tea, and taking a strong infusion of lobelia without any cayenne in it, in the same manner as for the stimulating form.

Injections.—Injections, or enemas, may be either laxative, cathartic, nervine, diaphoretic, or emetic, according to the articles used. Medicines thrown into the bowels, make a powerful impression on the whole frame; hence the use of injections saves the employment of so much medicine by the stomach, and accomplishes invaluable results in very many cases. They may be prepared as an ordinary tea; or a little starch may be boiled so as to make a thin mucilage, and the powdered medicines mixed in this. They are best given by having the patient lie upon the left side (or else the back) with the knees drawn well up toward the abdomen. The nose of the syringe is to be well oiled, and introduced to the bowel gently for about two inches. As the bowel lies in the hollow of the sacrum, and runs obliquely upward to the left, the nose of the syringe should be introduced with a little inclination to the left and on a line with the spinal column. All injections should be given lukewarm. When intended to move the bowels, about half a pint of fluid should be used at one time, for an adult. If intended to be kept, three ounces or less should be used.

Cathartic injections may be made of two or more tablespoonsful of molasses or brown sugar, or a half teaspoonful of salt, or a strong tea of boneset with a little ginger, or a very little soap in water.

Bitter Root-Apocynin .- Also called wandering

milk-weed. The root is a cathartic, especially for biliousness. From one-fourth to one-half a teaspoonful of the powder, is sufficient for a dose; or this quantity may be given in two doses, at intervals of eight or twelve hours. A strong tea may be made, and used in doses equivalent to the proper quantity of powder. Apocynin is a preparation from this root; and the bulk of a pea is a common dose.

Black Root—Leptandrin.—This is a mild, slow, and very reliable physic, especially for the liver. Half an even teaspoonful of the powdered root may be given once a day, or smaller quantities twice a day; or a tea may be used, as in the case of the bitter root. Leptandrin is the concentrated preparation; and the bulk of a pea is an ordinary dose.

Assafætida Pills.—The gum of assafætida is taken in pieces the size of a pea, and moulded into pills with the fingers—using freely of powdered slipperyelm, and giving them a covering of the same. One, two, or three, may be used at a time, once or twice a day. They are employed in hysteria, painful menstruation, general nervousness, etc.

Anti-Spasmodic Mixture. — Lady-slipper, two ounces; lobelia and ginger, each one ounce; blue-colush, half an ounce. Mix in the powdered or erushed state. An infusion is made with a pint of hot water on a heaped tablespoonful of the mixture; or the above quantities may be tinetured a week in a pint each of water and brandy. Used in hysterical paroxysms, colic and eramping during pregnancy, false labor pains, etc. Dose of the warm in-

fusion, one to three tablespoonsful every ten, twenty, or thirty minutes; of the tincture, one to three tablespoonsful.

Composition Powder.—One ounce each bayberry, ginger, and hemlock bark; half a drachm each redpepper and cloves. Mix the powders. Used by infusing from one to three teaspoonsful to a pint of boiling water, and giving from two to ten table-spoonsful every half hour, or oftener. Valuable in colds, pain in the bowels, flooding, coldness of the surface, dormant stomach, tardy labor, etc. Not used in high fever or inflammation.

Diaphoretic Mixture.—Four ounces white root; two ounces feverfew; one ounce each lobelia and ginger. A heaped tablespoonful of the mixed powders to a pint of boiling water, may be used in doses of from two to six tablespoonsful every twenty or thirty minutes. It promotes a sweat in all forms of fever and inflammation. In considerable quantities, it is quite nauseating, which is all the better for such patients.

Diffusive Drops.—Four ounces write root; two ounces each ginger, lady-slipper, anise seed, yellow-poplar and prickly-ash. Macerate for a week in three pints of rectified whisky; strain, and add a pound of white sugar. Or an infusion may be made of a pint of hot water on a largely-heaped table-spoonful of the mixed powders. This is a pleasant and prompt stimulant, nervine, and diaphoretic. Of the tincture, from one to three teaspoonsful may be given in a little warm water every ten, twenty, or thirty minutes; or from two to six tablespoonsful of

the warm infusion may be given. Used in all cases of cold, eongestion, and inward pain from congestion; and in faintness, fatigue, depression, loss of blood, and nervousness. For hysteria, eolic, suppressed menses, etc., to be given in a warm tea of camomile, catnip, or spearmint. For flooding, threatened abortion, etc., to be used in a warm tea of raspberry, beth-root, or bayberry.

Emmenagogue Tonic.—Four ounces each of motherwort and camomile; one ounce each of blue-cohush and red-flowering smart-weed. Tincture for a week in two quarts of malaga wine; strain, and add one pound of sugar. Used as a tonic in tardy, deficient and painful menstruation, when any medicine is needed. Dose from half to a whole table-spoonful three times a day.

Emmenagogue Pills.—Equal parts of extracts of motherwort and smart-weed, mixed, and stiffen with powder of black-eohush. From two to four pills, the size of a pea, may be taken every twelve hours. Used in languid conditions of the system, when the menses are suppressed; but not useful till good hygienic regulations have been found insufficien.

Female Restorative.—Aspen-poplar, eight ounces; golden-seal, wahoo, and unieorn root, each two ounces; priekly-ash bark, one ounce. Tincture for a week in five pints of malaga wine. Strain, and add two pounds of sugar. If wine is objectionable, the ingredients may be used in a well-sweetened decoetion. It is a fine stimulating tonic. Used for excessive menstruation, cold skin, indigestion, sallowness, bad leucorrhca, and prolapsus. Not proper

in deficient menses or feverish conditions. Dose, a tablespoonful three or four times a day.

Female Tonic.—Yellow-poplar (tulip-tree), eight ounces; carpenter's square and Solomon's-seal, each six ounces; scullcap and golden-seal, each two ounces. Tincture for a week in three quarts of malaga wine; strain, and add two pounds of sugar. A very superior tonic and nervine. Used in leucorrhea, prolapsus, hysteria, and all other female difficulties, when the patient is nervous or irritable. Also in cramps and pains during pregnancy. Not good in cold states of the system; and neither increases nor diminishes the menses. Dose, a table-spoonful three or four times a day.

Laxative Pills.—Extracts of wahoo and butternut, equal parts; stiffen into a pill mass with equal parts of powdered black-root and ginger. It is a gentle laxative to the liver and bowels; scarcely cathartic, unless used freely. Dose, two or three pills on going to bed; or one pill twice a day.

Laxative Sirup.—Four ounces each of coarse balmony, butternut bark, and senna. Simmer gently for two hours in five pints of water; strain, add two pounds of sugar, and evaporate slowly to three pints. Add half an ounce each bi-carbonate of soda and essence of peppermint. Used as a mild tonic and laxative, and corrector of sour stomach, in ordinary costiveness and for children with worms. Dose, a tablespoonful every three hours; and a teaspoonful or more for a child.

Liver Pills.—Leptandrin, three drachms; apocynin, one drachm; shavings of white castile soap,

two drachms. Soften the soap with a little essence of peppermint, and mix the powders with this into a pill mass. Or the same proportions of the extracts of black-root and bitter-root may be stiffened into a pill mass with powdered magnesia. Used as a mild yet reliable physic in all obstructions of the liver, gall ducts, and bowels; also correcting acidity of the stomach. Dose, two at bed-time.

Lobelia Pills.—Two parts lobelia seeds, one part lady-slipper. Mix the powders in a sufficient quantity of dandelion or boneset extract. Used as a nauseant, relaxant, and nervine, in feverish, irritable, and nervous cases. One or two may be taken every two, four, or six hours, as needed.

Compound Lobelia Pills.—Three parts lobelia seeds, two parts golden-seal, half a part prickly-ash bark. Mix these combined powders in a sufficient quantity of boneset extract, and form into pills. One or two of these may be taken at bed-time, or after each meal, or every four hours, to sustain digestion, relieve wakefulness, etc.

Mother's Cordial.—A pound of one-berry (or squaw-vine); half a pound each of spikenard and cramp bark (called high-cranberry); four ounces of blue-cohush. Macerate eight hours in six quarts hot water; strain, and add five pounds of white sugar. When cold, add a quart of madeira wine. Used in hysteria, weak backs, crampings during pregnancy, etc. Dose, a large tablespoonful three or four times a day.

Nervine Injection.—Lobelia herb and lady-slipper, each onc ounce; blue-cohush and elm, each half an

ounce. Mix the powders. An even teaspoonful or more, in four ounces of tepid water, is a valuable injection in hysteria, and all forms of nervousness or pain. Repeated as needed, and retained.

Neutralizing Cordial.—Four ounces dried peppermint; two ounces rhubarb; one ounce each goldenseal and bi-carbonate soda. Tincture several days in a quart each of water and brandy; strain carefully, and add two pounds of white sugar. Used to relieve sourness of the stomach, and looseness and griping of the bowels. Invaluable for children. An adult may use a tablespoonful every four or two hours, till relieved; a child of five years, a teaspoonful. When continued for several days, use every six hours.

Rheumatic Liniment.—In two quarts of 98 p. c. alcohol, let the shavings of four ounces of white castile soap dissolve slowly. In a separate bottle, tincture eight ounces of prickly-ash bark in two quarts of 98 p. c. alcohol. After ten days, strain this tincture and add to the first bottle; and then add an ounce each of oils of red-cedar, origanum, and wormwood. It is a valuable liniment, to apply twice or oftener a day, in rheumatism and neuralgia.

Spiced Bitters.—Half a pound aspen-poplar; two ounces each balmony, golden-seal, and prickly-ash; one ounce each cloves and ginger; two drachms cayenne. Mix the powders with half a pound of sugar. Used as a tonic, of the strong and stimulating quality. Excellent for general languor, indigestion, etc. Dose, an even teaspoonful of the

powder before each meal; or an equivalent of the infusion.

Stimulating Liniment.—In a half gallon of 98 p. e. alcohol, tincture for one week six ounces of the best cayenne-pepper. Strain, and add an ounce and a half each oils origanum, hemlock, and sassafras. Used as a superior stimulant outwardly in all inward congestions, inflammations, pains, cramps, flooding, dysentery, etc.; and all outward coldness.

Wine of Comfrey.—Two ounces each of comfrey, Solomon's-seal, spikenard, and columbo; half an ounce of gentian. Cover the bruised articles with boiling water, in a close vessel; and when cold, add two quarts of sherry wine. In a week, it may be strained, and a half pound of sugar added. It is an excellent tonic for all forms of female weakness and indigestion. Dose, a tablespoonful or more, three times a day.

Woman's Friend.—Columbo, four ounces; goldenseal and unicorn, each two ounces; bayberry and orange-peel, each half an ounce; cayenne, one scruple. Prepare in the same manner as the wine of comfrey, using five pints of pale port wine. A tonic of great value in cases in which the female restorative is used; but is more stimulating and astringing, and better for cases of unusual depression. Dose, a small tablespoonful or more, three times a day.

## INDEX.

Abdomen enlarging in dropsy, 216. Black root, 396. Abdominal supporters, 178.

Abortion, 285-eaused by polypus, 200.

Abseess of labia, 84-of breast, 365-of ovaries, 213.

After-birth, see placenta, 239removing the, 329.

After delivery, management. 356. After pains, 359.

Air, fresh and dry necessary, 67, 68, 378, 392.

Ante-version of the womb, 184. Anti-spasmodie mixture, 396.

Amenorrhea, 107. Apocynin, 395.

Appetite, capricious, in chlorosis, 126-in dropsy, 216-in pregnancy, 250.

Assafœtida pills, 396.

Assistance in child-birth, 316, 324. Babe, feeding a, 338, 339, 375—bathing a, 377—washing and dressing, 336.

Back, painful, in amenorrhea, 108, 119-in polypus, 199-in prolapsus, 166-weakness of, 97.

Baldness, to prevent, 71. Bandaging the mother, 333.

Bathing, children, 377-during pregnancy, 262-lukewarm, 68 -uses of, 68.

Bearing-down in labor, 305-in polypus, 200-in tumors, 202. Bed-rooms, children's,

regulate all, 73, Bed, the best kinds, 73-for child-

ren, 378.

Bed, the, in confinement, 299. Beginning of life, 236.

Bitter root, 395.

Bladder, displacement of, 190pains at neck of 155, 157.

Bleeding, at the nosc, 42-causing convulsions, 349, 351-in pregnancy, 275-of the navel, 381. Blindness from intermarriage, 226. Blistered spots on labia, 87.

Blood, anomalous discharges of, 114-discharge of in polypus, 199-in eauliflower excreseence, 204—excess in pregnancy, 275 -spitting in pregnancy, -vomiting, 108 -vomiting in pregnancy, 275.

Body needs a school, 9.

Bones of the pelvis, 21.

Bowel, displacement of the, 192. Breast, caked, 365-ehanges of in pregnancy, 247-painful in inflamed womb, 157-in caneer, 207-injured by camphor, 364,

Breathing difficult in chlorosis, 126, 134-in ovarian dropsy, 216 -hurried in nymphomania, 89 -short in pregnancy, 281.

Breathlessness in a babe, 335. Breech presentation, 315.

Camphor injurious to the breasts, 364, 366.

Cancer at turn of life, 135-of the womb, 205.

Carbuncle of labia, 85. Catamenia, see menses, 40. Catheter, how to use the, 285 378-to Cauliflower excrescence, 203.

Cessation of menses, 132.

Chafing in children, 378. Change of life, 132.

Child, attentions to the new-born, 335-development of in the womb, 240-expulsion of the, 326—feeding a, 339,

nourishment of in the womb,

243-positions of in the womb, Cosmeties injurious, 70. 242, 341-washing and dressing Costiveness, 138-from tight lac-

Child-bearing, frequent, injurious,

Child-bed fever, 368.

Child-birth, 292—assistance in, 316, 324-cartilages yield in, 25-difficult or tedious, 340giving medicines in, 319-management after, 356-preparations for, 292-when to expect,

Childhood, disorders of, 381-hygiene for, 375-mortality in, 11. Children's health inherited, 10injured by early marriages, 222

389—exercise, 379—sleep, 378. Chlorosis, 125-from exposures,

53-trom ill-development, 52. Choking sensations, 144.

Climate influencing menses, 45. Clitoris, 31.

Closure of the labia, 90.

children, 377-heavy, Clothingcausing prolapsus, 65-rules

for, 63-tight, injurious, 65. Colic, after delivery, 361-in children, 383-in congested womb, 155-in pregnancy, 271

-in uterine tumor, 202. Coldness, in chlorosis, 127.

Conception, 232, 234-abnormal, 254—false, 256-when possible, 47.

Confinement, see child-birth, 292. Congestion, of the womb, 155.

Constipation, see costiveness.

Constitution, may be improved, 14—to procure a good, 60.

Consumption, from chlorosis, 127 —dark and damp houses, 205 early marriages, 223-exposures, 43-improper clothing, 64, 66-imperfect development, 53—using forcing medicines, 58—prevention of, 387—should prohibit marriage, 226, 227, 389 -should prohibit nursing, 377.

Convulsions, caused by bleeding, 349, 351-in labor, 348.

Complexion, improving the, 70, 71. Composition powder, 397.

Cord, umbilical, 239.

ing, 65-in children, 381-in chlorosis, 125-in ovarian dropsy, 217-in pregnancy, 273in prolapsed vagina, 189.

Cough, hysterical, 145-in preg-

nancy, 281.

Counsel, calling, 347.

Cramps, in inflamed womb, 157. Dandruff, to prevent, 71:

Darkness injurious, 128, 205, 389. Deafness from intermarriage, 226. Deficient menstruction, 79, 107.

Deformed organs, 32.

Deformities of babes, 255-regulating the, 339.

Delivery, management after, 356 —see ehild-birth 292.

Development of females, 34-to hasten or retard, 38-imperfect, 53-premature, 51-of puberty, 37-of the feetus, 237.

Diaphoretic unixture, 397.

Diarrhea, in children, 383-in pregnancy, 274.

Diet, in puberty, 61—luxurious hurtful, 62.

Diffusive drops, 397.

Digestion deranged in pregnancy,

Discharge, feetid in cancer, 207fætid, in cbild-bed-fever, 370in inflamed labia, 83—in leucorrhea, 118, 119—in nymphomania, 89-in polypus, 199-in prolapsed vagina, 189--in ulcerated womb, 160-reddish in cancer, 206-watery, 204.

Disease not a necessity, 18, 20. Diseases of pregnancy, 264-of

infancy, 381.

Displacement, of the bladder, 190 -of the ovaries, 192-of the rectum, 192-of the womb, 184. Dizziness before menstruction, 42.

Dragging sensations, 166. Dressing a babe, 336.

Drinks, iced, injurious, 78.

Dropsy, in polypus, 200-in pregnancy, 282-of the labia, 86of the ovaries, 214-of the womb, 194.

Dysmenorrhea, 103.

Dyspepsia, from tight clothing, Gaugrene of labia, 85. 65—in ovarian dropsy, 216— Gathered breast, 365. in polypus, 200-in pregnancy, Gestation, see Pregnancy, 232. 274.

Eurs, ringing in the, 93-stoppage of in pregnancy, 250. Earthy color of skin, 127.

Eggs, see ova, 30.

Emmenagogue pills, 398-tonic, 398.

Emetics, 393-avoided in menstrual flow, 79.

Epilepsy from intermarriage, 226. Ergot, 321.

Erysipelas of labia, 85.

Examinations, to make, 307, 316. Excrescence, cauliflower, 203.

Exercise, a necessity, 66-of children, 379-regulating in puberty, 66.

Exposures, dangerous during menstrual flow, 78-during puberty, 43.

Eyes, blueness under, 120-inflamed in children, 385.

Fainting, before menstruation, 42. —in chlorosis, 127—in hysteria, 144—in pregnancy, 280.

Faintness, in leucorrhea, 120-in polypus, 200-in prolapsus, 170 —on sitting up, 155.

Falling of the womb, 161. Fallopian tubes, 29.

False conception, 256.

Fashions, injurious, 12. Feeding, a babe, 339-children,

339, 375. Female development, 34-organs, 21-deformities of organs, 32.

Female restorative, 398-tonic, Fever, child-bed, 368-milk, 361.

Flatulence in prolapsus, 168. Flooding, 352.

Flow, see Lochia, 360.

Fluor albus, 115.

Fœtus, development of, 237, 240. —diseases of, 245—lungs of, 243-241-nourishment of, pulse of, 240.

Food, of children, 375-rules for Indigestion, see Dyspepsia. for regulating, 61.

Forceps, using in child-birth, 340. Forcing medicines injurious, 57,58.

Getting up, 362.

Girlhood caprices of, 76-changes in, 38-duties of mothers during, 36.

Godfrey's cordial, 382.

Green sickness, see Chlorosis, 125. Groins, painful in inflamed womb, 154-in inflamed ovaries, 212 -swellings in, 84-weighty in

ovarian dropsy, 215.

Hair, means of improving, 72. lleadache, at turn of life, 134menstruation, 42-in before chlorosis, 127-in pregnancy, 265-in tardy menstruction, 93. Head, cold in, hysteria, 144.

Health, improved in pregnancy, 231-rules for establishing, 54. Hearing, disturbed in pregnancy, 267.

Heart-burn, 216, 270.

Heart, oppression at the, 134palpitation of in chlorosis, 126. in nymphomania, 89—in-pregnancy, 279-in premature development, 52.

Heat, flushes of, 134.

Hemorrhage, after confinement, 352-in cancer, 207-in uteriue polypus, 199.

Hernia of uterus and ovaries, 192. Hieongh in hysteria, 143.

Hip, heavy feelings in, 215. Hoffman's anodyne, 382. Houses, unhealthy, 205. Husband, selecting a, 221.

Hydatids, 256.

Hygienic rules, after delivery, 356 for children, 375-for girlhood, 54-for pregnancy, 258. Hymen, 32-imperforate, 33, 90. Hysterics, 141-symptoms of before menstruation, 42t-from

developmen 52premature from suppressed menses, 108. Iced drinks injurious, 78.

Idleness unhealthy, 93, 97.

Infancy, disorders of, 381-management of, 375-mortality of, 11.

Inflamed eyes of children, 385- Menorrhagia, see Profuse Menlabia, 83-ovaries, 211-womb, 154.

Injections, 395-laxative, 173.

Innominate bones, 23.

Instruments, in delivery, 340injurious from, 165, 342.

Intermarriages wrong, 226. Impregnation, see Conception.

Itching of the vulva, 87. 381-in Jaundice, in children,

pregnancy, 274. Journeys affect menses, 46-when

improper, 79.

Labia, 31—diseases of, 83, 91. Labor (work), excessive injurious,

66, 78, 93, 262, 380.

Labor (confinement), a natural process, 292-arrangements for, 298-bed in, 299-difficult, 340 —duration of, 310—natural, 300—pains, 303—position in, 300-positions of child in, 311. bad presentations, 346-signs

of approaching, 300. Lascivious passions, 89. Late hours exhaustive, 72. Laxative pills, 399-sirup, 399.

Leg, milk, 373. Leucorrhea, 45, 115-taking the

place of menses, 45. Life, beginning of, 236.

Liver, complaints of in leucorrhea. 119.—in pregnancy, 268. Liver pills, 399.

Lobelia pills, 400-compound, 400.

Lochia, 360.

Longings, 250, 259.

Lungs, bleeding from, 276-disease of checks menses, 65. Marks on children, 255.

Marriage, 219-early, favors disease, 164, 223, 389—causes for-bidding, 227—time to marry, 221.-when objectionable, 225.

Maternity requires strong body, 47, 221.

edicines, 393—forcing, injurious, 54, 56, 58, 60, 92—in Medicines, injuehild-birth, 319-used too much,

Men as wet-nurses, 251.

struation, 96.

Menses, appearance of, 40 .- cessation ot, 132-eessation of in pregnancy, 249—checked by diseased lungs, 65—deficient promoted, 79-regularity of, 41—influenced by climate, 45. by journeys, 46—by ovaries, 48—interruptions of, hurtful, 44, 50-may nover appear, 46, 92-must not be forced, 56, 92. seeming like leucorrhea, 45—source and object of, 47, 49 suppressed at puberty, 46symptoms of approach of, 41.

Menstruation, 40 —cessation of, 132—deficient, 79—excessive, 79, 96 -hastening or retarding, 80—painful, 36, 103—sup-presed, 107—tardy, 92—vica-rious, 108, 114—see also

Menses.

Milk, cow's, preparing for children, 375-milk fever, 361milk leg. 373-scereted without pregnancy, 252.

Mind, changeable in pregnancy, 248-guiding a girl's, 74.

Miscarriage, see Abortion, 285. Moles, 256.

Mons veneris, 31.

Monthly periods, discharge of ova during, 30-regimen for, 77. Morning sickness, 249.

Mortality among children, 11. Mother's cordial, 400-duty to daughters, 36-influence chil'ds constitution, national health, 10. ..

Mouth, sore, of children, 384. National strength, source of, 10. Natural labor, course of, 300, 311.

Nature, power of, 58, 340.

Nausea, in leucorrnea, 120—in ovarian dropsy, 216-in polypus, 200-in pregnancy, in prolapsus, 167, 168.

Navel-string, 239-tying, bleeding of, 381.

Nervine injection, 400.

Nervousness, from bad puberty, 36-high living, 62-late

hours, 72-premature develop- Positions of the child, 242, 311 .ment, 52-in pregnancy, 265. Neuralgia in pregnancy, 250, 265. of womb, 151. Neutralizing cordial, 401. Nipples, sore, 363. Nose, bleeding at before menstruation, 42. Nourishment of the fœtus, 243. Novel-reading hurtful, 52, 76. Nurses, men as, 251 -single women, as, 17-qualifications of, 296. Nursing sore-mouth, 384.

Nymphea, 31. Nymphomania, 89. Operas injurious, 53. Opiates destructive, 382. Organs, female, 21-deformities

ot, 30--diseases of, 83-imperfect, 51 - premature development of, 48.

Ova, 29-when discharged, 30. Ovaries, 21-abscess of, 213dropsy of, 214 -hernia of, 192. inactivity of, 92 -inflammation of, 211-influence of, menses, 32 .- insufficient development of, 92.

Painful menstruation, 36, 103. Pains, of labor, 303-in cancer,

Paleness deplorable, 128-sudden, in inversion, 181. Palpitation, see Heart. Paregorie, 382. Parties injurious, 52, 76. Passions, how to regulate, 74. Peculiarities of women, 16, 19. Pelvis, 21-dimensions of, 25. Perineum, distension in labor,

308. Perverseness, girlish, 76. Pessaries, 177. Physician, selection of a, 296. Physicking a babe, 338. Piles in pregnancy, 273, 278. Placenta, 238, 239-function 244-growth to uterus, 244pulling at, injurious, 180-reinoving the, 329. Plethora in pregnancy, 274. Polypus of the womb, 197.

for confinement, 300.

Pregnancy, 229-abdominal, 235. -changes duing, 235-diseases of, 264-distinguishing, 252duration of, 232-health improved during, 231 —hygiene for, 258—signs of, 249—simulated by ovarian dropsy, 216by tumors, 202-by uterine diseasc, 253.

Presentation in delivery, natural, 315, 357-unu-311—breech, sual, 346.

Prevention of scrofula and consumption, 387.

Profuse menstruation, 79, 96. Pruritus, 87.

Puberty, period of, 34-dangers 36, 37-development during, 36, 37—development of, 37—hygiene for, 54—influ-

enced by habits, 38. Pubes, 23. 348-fe-

Puerperal convulsions, ver, 368. Pulse of the fœtus, 240. l'urgatives cause discase, 165-

improper at menstruation, 79. Quickening, 240, 251. Rectum, displacement of, 192. Regularity of menses, 41. Relations should not marry, 226.

Restlessness of children, 381. Retained placenta, 329. Retarded menstruation, 92. Retroversion of the womb, 184. Rheumatic liniment, 401. Rheumatism of the womb, 151. Room, the lying-in, 297.

Rupture of uterus, see Hernia, 192. Sacrum, 22—pains in, 185. Salivation in pregnancy, 250, 271. Sallowness, 97-in leucorrhea, 120-in profuse menstruation,

96. School for body, 9-too taxing, 75, 392.

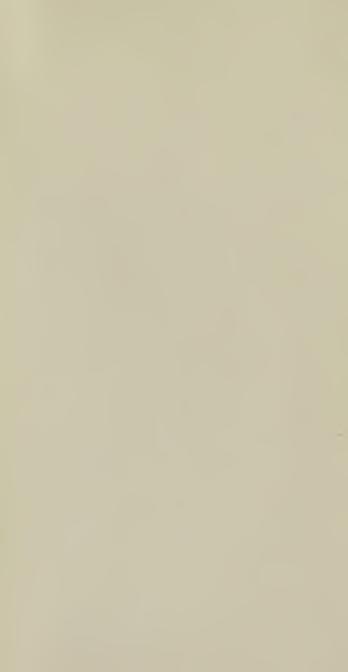
Scrofula, from early marriage, 223. 389-from intermarriage, 226 -from dampness, 392-pre-387-should forbid venting, 389—forbid marriage, 226, nursing, 377.

Sex, influencing the, 236.

Sexual excitements, to regulate, 74-nngovernable, 89. Shivering, in labor, 310. Show in labor, 306. Sickness, morning, 249. Sighing in hysteria, 143, 144. Sight, disturbed, in chlorosis, 127 —in pregnancy, 267. Skin, improving the, 71—shrivelled and waxy in cancer, 209. Sleep in labor, 309—in pregnan-ey, 261—in puberty, 41—of children, 378—rules for regulating, 72, 379. Sleeplessness in pregnancy, 267. Smothering sensations, 126. Spasms, hysterical, 142-puerpc ral, 348. Spiced bitters, 401. Spinal disease, 53-from chlorosis, Spitting blood, 276. Sprue, 384. Sterility, 36, 108. Stimulating liniment, 402. Stomach, dragging sensations at, 191. Study, too much injurious, 74, 75, Sunshine necessary to health, 67, 73, 128, 205, 389. Suppressed menstruation, 107. Swimming, 70. Swollen labia, 84, 85, 86, 91-leg, Tardy menstruation, 92. Teeth, when not to extract, 79cutting teeth, 386. Tenacity, vital of woman, 17. Theatres injurious, 52, 76. Thighs, pains in, 154, 217, 373tumor on, 154. Thrush, 384. Toothache in pregnancy, 266. Trembling in labor, 310. Tubes, Fallopian, 29. Trusses, 193. Tumor, of the labia, 91-fibrous, of the womb, 201-uterine, simulating pregnancy, 253. Turn of life, 132.

Umbilical, cord, 239.

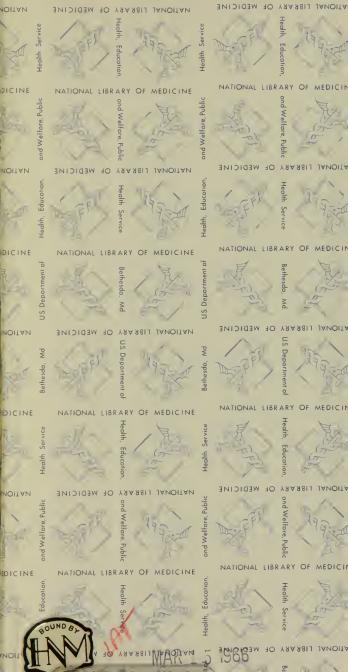
202, 216, 284-frequent, 185involuntary, 284—painful, 91, 154, 157, 191, 200, 212. Urine, fætid, 144-dribbling of, 167--scalding of, 8, 83, 91, 212, 284-retained, 185-retained in children, 385-to draw with the catheter, 285. Uterus, see Womb, 26-changes of in pregnancy, 245-development of, 38-dropsy of, 194. Vagina, 31-prolapse of, 188. Veins, distended, in pregnancy, 277-of labia, enlarged, 91. Ventilating bed-rooms, 73. Vicarious menstruation, 108, 114. Voice, sudden weakness of, 181. Vomiting, in child-bed fever, 369 -in inverted womb-181-in labor, 309 -in ovarian dropsy, 216-in pregnancy, 268-of children, 376-of blood, 108of blood in pregnancy, 275. Vulva, 31. Walking, pain in, 188. Waters the, 240-discharge of, Watery discharge, 204. Weakness, female, 115. Weaning children, 376. Wet-nurses, 390—men as, 251. Whites, the, 115. Wine of comfrey, 402. Winslow's sirup, 382. Woman's friend, 402. Woman, peculiarities of, 16, 19influence of, 16—diseases not necessary, 18, 20-vital tenacity of, 17. Womanhood, change to, 38-rules for healthy, 54. Womb, 26, 27—cancer of, 205—changes of in pregnancy, 27, 245-congestion of, 155-contractions in labor, 306-diminution of, 135-displacements of, 184-dropsy ot, 194-falling of, 65, 161-hernia of, 192-154-inverinflammation ot, sion of, 180-neuralgia of, 151 -polypus of, 197--tumors of, 201 --- ulceration of, 159. Unination, difficult, 167, 188, 191, Work, see Labor.











NATIONAL LIBRARY OF MEDICINE